The Black Indies

Jules Verne

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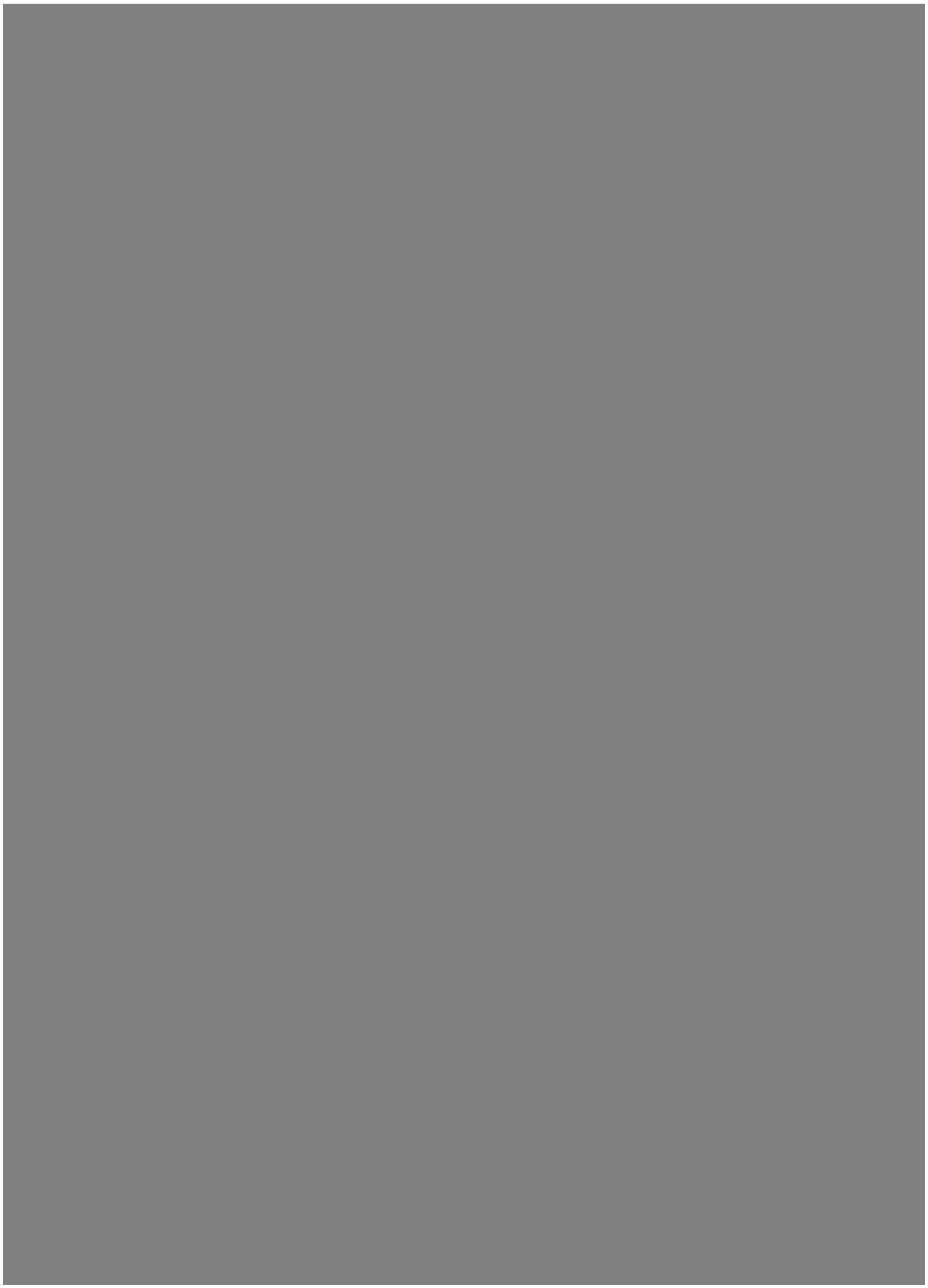

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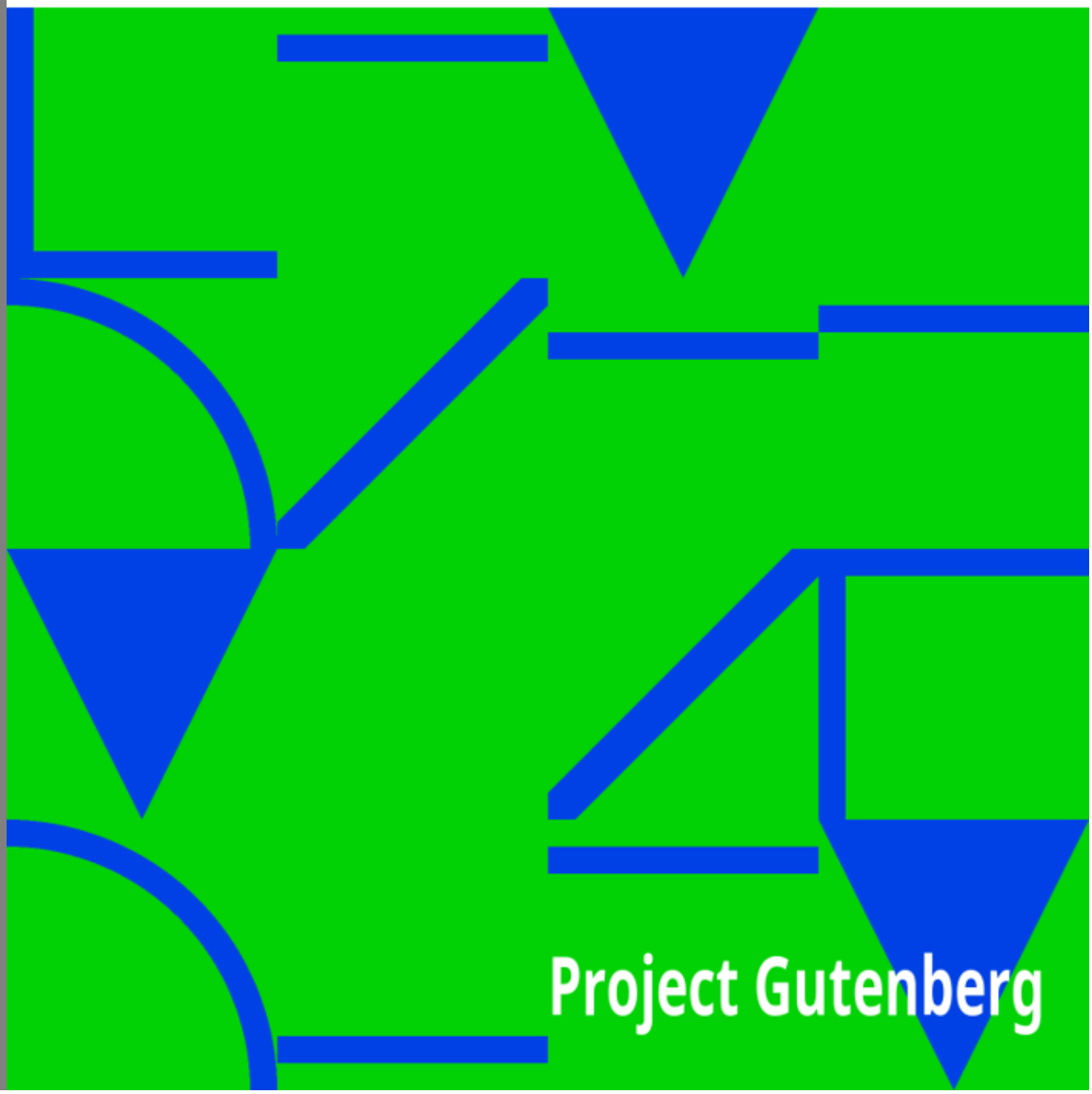

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*** START OF THE PROJECT GUTENBERG EBOOK THE BLACK INDIES ***

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by

JULES VERNE

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I

Two contradictory letters

“Mr. JR Starr, engineer,
"30, Canongate."
"Edinburgh."

"If Mr. James Starr wishes to visit the Aberfoyle coal mines tomorrow, Dochart pit, Yarrow shaft, he will be given a communication of a nature to interest him.

"Mr. James Starr will be expected all day at Callander station by Harry Ford, son of former overman Simon Ford.

"He is asked to keep this invitation secret."

This was the letter that James Starr received by the first mail on December 3, 18.., — a letter bearing the postmark of Aberfoyle Post Office, County Stirling, Scotland.

The engineer's curiosity was piqued. It didn't even occur to him that this letter could contain a hoax. He had known Simon Ford for a long time, one of the former foremen of the Aberfoyle mines, of which he, James Starr, had been the director for twenty years — what, in English coal mines, is called the "viewer".

James Starr was a robust man, whose fifty-five years weighed no more heavily on him than if he had been only forty. He belonged to an old Edinburgh family, of which he was one of the most distinguished members. His work brought honor to the respectable profession of engineers who were gradually devouring the coal-bearing subsoil of the United Kingdom, from Cardiff and Newcastle to the lower counties of Scotland. However, it was particularly in the depths of those mysterious Aberfoyle coalfields, which border the Alloa mines and occupy part of County Stirling, that Starr's name had earned widespread esteem. There he had spent almost his entire life. In addition, James Starr was a member of the Society of Scottish Antiquaries, of which he had been appointed president. He was also among the most active members of the Royal Institution, and the *Edinburgh Review* frequently published remarkable articles by him. He was, as we can see, one of those practical scholars to whom England owes its prosperity. He held a high rank in that old capital of Scotland, which, not only from a physical point of view, but also from a moral point of view, could deserve the name of "Athens of the North".

We know that the English gave their vast coalfields a very significant name. They quite rightly called them the "Black Indies," and these Indies perhaps contributed more than the East Indies to increasing the surprising wealth of the United Kingdom. There, in fact, an entire population of miners worked day and night to extract coal from the British subsoil, this precious fuel, an indispensable element of industrial life.

At that time, the time limit set by experts for the exhaustion of coal mines had been greatly extended, and famine was not to be feared in the short term. There was still ample opportunity to exploit the coal deposits of both worlds. Factories, suited to so many diverse uses—locomotives, steam engines, steamers, gasworks, etc.—were not about to run out of mineral fuel. However, consumption had increased so dramatically in recent years that some seams had been exhausted down to their thinnest veins. Now abandoned, these mines needlessly scarred

and crisscrossed the earth with their deserted shafts and empty galleries.

This was, precisely, the case of the Aberfoyle coal mines.

Ten years earlier, the last skip had removed the last ton of coal from this deposit. The equipment from the "underground" [1*]—machines for mechanical traction on the gallery rails, mine cars forming the underground trains, subterranean tramways, cages serving the extraction shafts, pipes whose compressed air powered drills—in short, everything that constituted the mining equipment had been pulled from the depths of the pits and left on the surface. The coal mine, exhausted, was like the carcass of a colossal beast, from which the various organs of life had been removed, leaving only the skeleton.

Of this equipment, only long wooden ladders remained, serving the depths of the coal mine via the Yarow shaft, the only one that now gave access to the lower galleries of the Dochart pit, since the cessation of work.

Outside, the buildings, formerly used for the "day" work, still indicated the place where the shafts of the said pit had been sunk, completely abandoned, as were the other pits, which together constituted the Aberfoyle coal mines.

It was a sad day when, for the last time, the miners left the mine in which they had lived for so many years.

Engineer James Starr had gathered these few thousand workers, who made up the active and courageous population of the coal mine. Pickers, rollers, drivers, backfillers, timbermen, roadmen, receivers, weighbridgers, blacksmiths, carpenters, all, women, children, old people, underground and surface workers, were gathered in the immense courtyard of the Dochart pit, formerly cluttered with the overflow of the coal mine.

These good people, soon to be scattered by the necessities of life—they who, for many years, had succeeded one another from father to son in old Aberfoyle—awaited, before leaving it forever, the engineer's final farewell. The Company had distributed the current year's profits to them as a bonus. Not much, really, for the yield from the veins had barely exceeded the operating costs; but it should allow them to wait until they were hired, either in the neighboring coal mines or on the farms or in the factories of the county.

James Starr stood before the door of the vast lean-to, under which the powerful steam engines of the extraction shaft had operated for so long.

Simon Ford, the overman of the Dochart pit, then fifty-five years old, and a few other foremen surrounded him.

James Starr revealed himself. The miners, hats off, remained in profound silence.

This farewell scene had a touching quality, which was not lacking in grandeur.

“My friends,” said the engineer, “the time has come for us to part. The Aberfoyle coal mines, which for so many years united us in common work, are now exhausted. Our searches have failed to lead to the discovery of a new vein, and the last piece of coal has just been extracted from the Dochart pit!”

And, to support his word, James Starr showed the miners a block of coal that had been kept at the bottom of a skip.

“This lump of coal, my friends,” James Starr continued, “is like the last blood cell that flowed through the veins of the coal mine! We will keep it, just as we kept the first piece of coal extracted 150 years ago from the Aberfoyle seams. Between those two pieces, many generations of workers toiled in our pits! Now it is over! The last words your engineer speaks to you are words of farewell. You have lived off the mine, which has emptied itself beneath your hand. The work has been hard, but not without profit for you. Our great family will disperse, and it is unlikely that the future will ever reunite its scattered members. But do not forget that we have lived together for a long time, and that, among the miners of Aberfoyle, it is a duty to help one another. Your former foremen will not forget it, either.” Having worked together, we could never be strangers to one another. We will watch over you, and wherever you go, as honest people, our recommendations will follow you. Farewell then, my friends, and may Heaven be with you!

That said, James Starr hugged the oldest worker in the coal mine, whose eyes were filled with tears. Then, the foremen from the different pits came to shake the engineer's hand, while the miners waved their hats and shouted:

"Goodbye, James Starr, our leader and our friend!"

These farewells were meant to leave an indelible memory in all those brave hearts. But, little by little, as it had to, this crowd sadly left the

vast courtyard. A void opened up around James Starr. The black earth of the paths leading to the Dochart pit resounded one last time under the miners' feet, and silence replaced the noisy activity that had until then filled the Aberfoyle coal mine.

One man had remained alone near James Starr.

It was the overman Simon Ford. Near him stood a young boy, aged fifteen, his son Harry, who had been employed in the work underground for some years already.

James Starr and Simon Ford knew each other, and, knowing each other, respected each other.

"Goodbye, Simon," said the engineer.

"Goodbye, Mr. James," replied the overman, "or rather, let me add: Farewell!"

"Yes, goodbye, Simon!" James Starr continued. "You know I'll always be happy to see you again and talk with you about the past of our old Aberfoyle!"

— I know, Mr. James.

— My house in Edinburgh is open to you!

"It's a long way, Edinburgh!" replied the overman, shaking his head. "Yes! A long way from Dochart Pit!"

— Far away, Simon! Where do you intend to stay?

"Right here, Mr. James! We will not abandon the mine, our old nurse, just because her milk has dried up! My wife, my son, and I will find a way to remain faithful to her!"

"Goodbye then, Simon," replied the engineer, whose voice, despite himself, betrayed his emotion.

“No, I repeat: goodbye, Mr. James!” replied the overman, “not farewell! On Simon Ford’s word, Aberfoyle will see you again!”

The engineer didn't want to shatter this last illusion for the overman. He kissed young Harry, who gazed at him with wide, emotional eyes. He shook Simon Ford's hand one last time and left the coal mine for good.

This was what had happened ten years earlier; but, despite the overman's recent expression of desire to see him again someday, James Starr had not heard from him again.

And it was after ten years of separation that he received this letter from Simon Ford, inviting him to return without delay to the old coal mines of Aberfoyle.

What could this communication be that might interest him? The Dochart pit, the Yarow shaft! What memories of the past these names brought back to his mind! Yes! Those were the good old days, the days of work, of struggle—the best days of his life as an engineer!

James Starr reread the letter. He turned it over and over in his mind. He truly regretted that Simon Ford hadn't added another line. He resented him for being so laconic.

Was it therefore possible that the old overman had discovered some new vein to exploit? No!

James Starr remembered with what meticulous care the Aberfoyle coalfields had been explored before work finally ceased. He himself had carried out the last soundings, without finding any new deposits in the soil ruined by excessive mining. They had even tried to access the coal-bearing strata beneath the layers that normally lie below it, such as the Devonian red sandstone, but without success. James Starr had therefore abandoned the mine with the absolute conviction that it no longer contained a single lump of coal.

“No,” he repeated to himself, “no! How could I admit that what had escaped my research had been revealed to Simon Ford? Yet, the old overman must surely know that there is only one thing in the world that could interest me, and that is this invitation, which I must keep secret, to go to the Dochart pit!...”

James Starr always came back to that.

On the other hand, the engineer knew Simon Ford as a skilled miner, particularly gifted with a natural instinct for the trade. He hadn't seen him since the Aberfoyle mines had been abandoned. He didn't even know what had become of the old overman. He couldn't have said what he did for a living, or even where he lived with his wife and son. All he knew was that he was to meet at the Yarow shaft, and that Harry, Simon Ford's son, would be waiting for him at Callander station all the following day. The plan, therefore, was clearly to visit the Dochart pit.

"I'll go, I'll go!" said James Starr, who felt his excitement increasing as the hour drew near.

This worthy engineer belonged to that category of passionate people whose minds are always boiling, like a kettle placed over a blazing flame. There are those kettles in which ideas boil vigorously, and others in which they simmer peacefully. And on that day, James Starr's ideas were boiling at full speed.

But then, a very unexpected incident occurred. It was the final straw, which would momentarily condense all the vapors in that brain.

Indeed, around six o'clock in the evening, by the third courier, James Starr's servant brought a second letter.

This letter was enclosed in a crude envelope, the inscription of which indicated a hand poorly trained in the handling of a pen.

James Starr tore open the envelope. It contained only a piece of paper, yellowed with age, and which looked as if it had been torn from some old, unusable notebook.

On this piece of paper there was only one sentence, worded as follows:

"There's no need for engineer James Starr to bother—Simon Ford's letter is now irrelevant."

And no signature.

[1] The operation of a mine is divided into "underground" work and "surface" work; the former taking place inside, the latter outside.

II

Along the way

James Starr's train of thought was abruptly halted when he read this second letter, which contradicted the first.

"What does that mean?" he wondered.

James Starr picked up the half-torn envelope. It bore, like the other, the postmark of Aberfoyle. It had therefore been sent from that same point in Stirling County. It hadn't been written by the old miner—obviously. But, no less obviously, the author of this second letter knew the

overman's secret, since he formally countermanded the engineer's invitation to go to the Yarow pit.

Was it therefore true that this initial communication was now pointless? Was the intention to prevent James Starr from making the trip, whether for no reason or for a good reason? Or was there rather a malicious intent to thwart Simon Ford's plans?

This is what James Starr thought, after careful consideration. This contradiction between the two letters only intensified his desire to go to Dochart Pit. Besides, if it was all a hoax, it was best to find out for sure. But it seemed to James Starr that more credence should be given to the first letter than to the second—that is, to the request of a man like Simon Ford rather than to the opinion of his anonymous opponent.

"In truth, since they claim to be influencing my decision," he told himself, "it must mean that Simon Ford's communication is extremely important! Tomorrow, I will be at the appointed meeting and at the agreed time!"

That evening, James Starr made his departure preparations. As his absence might be prolonged for several days, he informed Sir W. Elphiston, the president of the Royal Institution, by letter that he would be unable to attend the Society's next meeting. He also recused himself from two or three matters that were to occupy him during the week. Then, after instructing his servant to pack a travel bag, he went to bed, perhaps more impressed than the matter warranted.

The next day, at five o'clock, James Starr jumped out of bed, dressed warmly — for it was raining cold — and left his house on Canongate to go to Granton-pier to catch the steam-boat which, in three hours, goes up the Forth to Stirling.

For perhaps the first time, James Starr, as he crossed the Canongate [1*], did not turn to look at Holyrood, that palace of Scotland's ancient rulers. He did not see, before its postern gate, the sentries dressed in the ancient Scottish costume: green cloth petticoat, checkered plaid, and long-haired goatskin bag hanging from their thighs. Although he was a fanatic of Walter Scott, as every true son of old Caledonia is, the engineer, as he never failed to do, did not even glance at the inn where Waverley stayed, and where the tailor brought him that famous war tartan suit that the widow Flockhart so naively admired. Nor did he salute the small square where the mountain men unloaded their rifles after the Pretender's victory, at the risk of killing Flora MacIvor. The prison clock stretched its forlorn face across the middle of the street: he

glanced at it only to make sure he wouldn't miss his departure time. It must also be admitted that he didn't catch a glimpse of the house of the great reformer John Knox in Nehlerbow, the only man who couldn't be charmed by Mary Stuart's smiles. But, taking High Street, the popular thoroughfare so meticulously described in the novel * *The Abbot* *, he hurried towards the gigantic Bridgestreet Bridge, which links the three hills of Edinburgh.

A few minutes later, James Starr arrived at the General Railway station, and the train dropped him off half an hour later at Newhaven, a pretty fishing village located a mile from Leith, which forms the port of Edinburgh. The rising tide was then covering the dark , rocky beach. The first waves were lapping against a jetty, a kind of pier supported by chains. To the left, one of the boats that ply the Forth River between Edinburgh and Stirling was moored at Granton Pier.

At that moment, the *Prince of Wales 's chimney* belched out swirling plumes of black smoke, and its boiler rumbled dully. At the sound of the bell, which rang only a few times, the late travelers hurried to come forward. There was a crowd of merchants, farmers, and ministers, the latter recognizable by their breeches, long frock coats, and the thin white trim encircling their necks.

James Starr was not the last to embark. He nimbly jumped onto the deck of the *Prince of Wales* . Although the rain was falling heavily, not one of these passengers thought of seeking shelter in the steamboat's lounge. All remained motionless, wrapped in their traveling blankets, a few occasionally reviving themselves with gin or whisky from their bottles—what they call "dressing indoors." A final bell rang, the mooring lines were cast off, and the *Prince of Wales* maneuvered out of the small basin that sheltered her from the waves of the North Sea.

The Firth of Forth is the name given to the gulf formed between the shores of County Fife to the north and those of Counties Linlilhgow, Edinburgh, and Haddington to the south. It forms the estuary of the Forth, a small river, a sort of deep-water Thames or Mersey, which, flowing down from the western slopes of Ben Lomond, empties into the sea at Kincardine.

The crossing from Granton Pier to the end of the gulf would have been a short one, were it not for the need to stop at the various stations on both banks, which necessitated numerous detours. Towns, villages, and cottages sprawled along the banks of the Forth between the trees of a fertile countryside. James Starr, sheltered under the wide gangplank spanning the piers, wasn't trying to miss the scenery, now streaked by

the fine lines of rain. Rather, he was concerned with observing whether he was attracting the attention of any particular passenger. Perhaps, indeed, the anonymous author of the second letter was on the ship. However, the engineer couldn't catch any suspicious glances.

The *Prince of Wales* , leaving Granton Pier, headed towards the narrow strait that passes between the two points of Southouenferry and Northouenferry, beyond which the Forth forms a kind of lake, navigable for ships of one hundred tons. Through the mists in the distance, the snow-capped peaks of the Grampian Mountains appeared in brief clearings.

Soon, the steamboat lost sight of the village of Aberdour, the island of Colm, crowned by the ruins of a 12th- century monastery , the remains of Barnbright Castle, then Donibristle, where Regent Murray's son-in-law was assassinated, and then the fortified islet of Garvie. It passed through the Weensferry strait, left Rosyth Castle to port, once the residence of a branch of the Stuarts related to Cromwell's mother, passed Blacknesscastle, still fortified in accordance with one of the articles of the Treaty of Union, and skirted the quays of the small port of Charleston, from where lime from Lord Elgin's quarries was exported. Finally, the *Prince of Wales 's bell* signaled the station of Crombie Point.

The weather was very bad then. The rain, whipped by a violent breeze, was pulverized amidst these roaring gusts, which passed like waterspouts.

James Starr was not without some concern. Would Harry Ford's son even show up? He knew from experience that miners, accustomed to the profound stillness of the coal mines, were less willing to face such atmospheric disturbances than laborers or farmers. From Callander to the Dochart pit and the Yarow shaft, it was a distance of four miles. These were reasons that could, to some extent, delay the old foreman's son. However, the engineer was more worried that the meeting given in the first letter might have been canceled in the second. That, in truth, was his greatest concern.

In any case, if Harry Ford wasn't there when the train arrived in Callander, James Starr was determined to go to Dochart Pit alone, and even, if necessary, to the village of Aberfoyle. There, he would undoubtedly get news of Simon Ford, and he would learn where the old overman was currently living.

However, the *Prince of Wales* continued to raise heavy waves under the force of its paddles. Nothing could be seen of either bank of the river, nor of the village of Crombie, nor Torryburn, nor Torryhouse, nor Newmills, nor Carridenhouse, nor Ilirkgrange, nor Salt-Pans, on the right. The small port of Bowness, the port of Grangemouth, dug at the mouth of the Clyde Canal, disappeared into the damp fog. Culross, the old market town and the ruins of its Cistercian abbey, Ilinkardine and its shipyards, where the steamboat stopped, Ayrthcastle and its 13th-century square tower Clackmannan and its castle, built by Robert Bruce, were not even visible through the slanting streaks of rain.

The *Prince of Wales* stopped at the Alloa landing stage to drop off some passengers. James Starr felt a pang of sadness as he passed, after ten years' absence, near this small town, home to important coal mines that still supported a large working population. His imagination carried him away to the underground, where the miners' picks were still profitably digging. These Alloa mines, almost adjoining those of Aberfoyle, continued to enrich the county, while the neighboring deposits, exhausted for so many years, no longer employed a single worker!

The steamboat, leaving Alloa, plunged into the many meanders of the Forth over its nineteen-mile course. It moved swiftly between the tall trees on both banks. For a moment, in a break in the clouds, the ruins of Cambuskenneth Abbey, dating from the 12th century, appeared Then came Stirling Castle and the royal borough of the same name, where the Forth, spanned by two bridges, is no longer navigable for tall ships.

No sooner had the *Prince of Wales* docked than the engineer nimbly jumped onto the platform. Five minutes later, he arrived at Stirling station. An hour later, he got off the train in Callander, a large village located on the left bank of the Teith.

There, in front of the station, a young man was waiting, who immediately walked towards the engineer.

It was Harry, Simon Ford's son.

[1] Main and famous street of old Edinburgh.

III

The subsoil of the United Kingdom

For the sake of understanding this story, it is appropriate to recall in a few words the origin of coal.

During geological epochs, when the Earth's spheroid was still forming, a thick atmosphere surrounded it, saturated with water vapor and heavily impregnated with carbonic acid. Gradually, these vapors condensed into torrential downpours, which fell as if they had been poured from the necks of trillions of seltzer bottles. It was, in effect, a liquid laden with carbonic acid that poured torrentially onto a soft, poorly consolidated ground, prone to sudden or gradual deformation, held in this semi-fluid state by both the sun's rays and the heat of the Earth's internal mass. This was because the internal heat had not yet been stored at the Earth's center. The Earth's thin and incompletely hardened crust allowed it to escape through its pores. From there, a phenomenal vegetation — such, no doubt, as perhaps occurs on the surface of the inferior planets, Venus or Mercury, closer than the earth to the radiant star.

The continental soil, still poorly stabilized, became covered with immense forests; carbonic acid, so essential to the development of the plant kingdom, was abundant. Thus, plants grew in a tree-like form. There was not a single herbaceous plant. Everywhere there were enormous stands of trees, without flowers, without fruit, of a monotonous appearance, which could not have sustained any living being. The earth was not yet ready for the emergence of the animal kingdom.

This was the composition of these antediluvian forests. The class of vascular cryptogams dominated them. Calamites, varieties of tree horsetails, lepidodendrons, a kind of giant lycopod, twenty-five or thirty meters high, one meter wide at their base, asterophylls, ferns, sigillaria of gigantic proportions, whose imprints have been found in the mines of Saint-Étienne — all grandiose plants then, to which one would recognize analogues only among the humblest specimens of the habitable earth — such were, little varied in their species, but enormous in their development, the plants which exclusively composed the forests of this time.

These trees then submerged their roots in a kind of immense lagoon, made deeply humid by the mixing of fresh and sea water. They eagerly absorbed the carbon that they gradually extracted from the atmosphere, still unsuitable for the functioning of life, and it can be said that they were destined to store it, in the form of coal, in the very bowels of the globe.

Indeed, this was the era of earthquakes, of those shakings of the earth, caused by internal revolutions and plutonic activity, which suddenly altered the still uncertain contours of the Earth's surface. Here, mounds became mountains; there, chasms that would eventually be filled by oceans or seas. And then, entire forests sank into the Earth's crust, through the shifting layers, until they found a point of support, such as the original soil of the granitoid rocks, or until, through compaction, they formed a resistant whole.

Indeed, the geological structure presents itself in this order in the bowels of the globe: the primitive soil, which is surmounted by the fill soil, composed of primary terrains, then the secondary terrains whose coal deposits occupy the lower level, then the tertiary terrains, and above, the terrain of ancient and modern alluvium.

At that time, the waters, which no channel yet held back and which condensation generated across the globe, rushed forth, tearing from the barely formed rocks the elements needed to compose the schists, sandstones, and limestones. They reached above the peat forests and deposited the components of these soils, which would then lie on top of the coal-bearing strata. Over time—periods measured in millions of years—these soils hardened, settled, and enclosed the entire mass of the saturated forests beneath a thick shell of conglomerates, schists, compact or friable sandstones, gravel, and pebbles.

What happened in this gigantic crucible, where plant matter accumulated, buried at varying depths? A veritable chemical operation, a kind of distillation. All the carbon contained in these plants agglomerated, and little by little coal formed under the dual influence of enormous pressure and the high temperature provided by the internal fires, so close to it at that time.

Thus, one kingdom replaced another in this slow but irresistible reaction. The plant world was transformed into the mineral world. All these plants, which had lived a vegetative life under the active sap of the early days, were petrifying. Some of the substances enclosed in this vast herbarium, incompletely deformed, left their imprint on other, more rapidly mineralized products, which pressed them as if by a hydraulic press of incalculable power. At the same time, shells, zoophytes such as starfish, corals, and spirifers, even fish and lizards, carried along by the waters, left their clear and, as it were, "admirably drawn" impression on the still-soft coal.

Pressure appears to have played a considerable role in the formation of Carboniferous deposits. Indeed, the various types of coal used in

industry are due to the degree of pressure exerted. Thus, anthracite appears in the lowest layers of the coal-bearing strata; almost entirely devoid of volatile matter, it contains the greatest quantity of carbon. In contrast, lignite and fossil wood appear in the highest layers, substances in which the quantity of carbon is infinitely less. Between these two layers, depending on the degree of pressure they have been subjected to, are found veins of graphite, and both bituminous and lean coals. It can even be said that it is due to a lack of sufficient pressure that the peat bog layer was not completely altered.

Thus, the origin of coal mines, wherever they have been discovered on the globe, is this: engulfment in the earth's crust of the great forests of the geological era, then mineralization of the plants obtained over time, under the influence of pressure and heat, and under the action of carbonic acid.

However, nature, usually so bountiful, has not buried enough forests for a consumption spanning several thousand years. Coal will one day run out—that much is certain. Forced unemployment will therefore be imposed on the machines of the entire world unless some new fuel replaces coal. In the not-too-distant future, there will be no more coal deposits, except those covered by an eternal layer of ice in Greenland, near Baffin Sea, and whose exploitation is virtually impossible. This is the inevitable fate. The coal basins of America, still prodigiously rich—those of the Great Salt Lake, Oregon, and California—will one day yield only insufficient production. The same will be true of the coalfields of Cape Breton and the St. Lawrence, and the deposits of the Alleghenies, Pennsylvania, Virginia, Illinois, Indiana, and Missouri. Although the Carboniferous deposits of North America are ten times greater than all the deposits in the whole world, a hundred centuries will not pass before the million-mouthed monster of industry has devoured the last piece of coal on the globe.

The shortage, understandably, will be felt more quickly in the Old World. While there are indeed mineral fuel deposits in Abyssinia, Natal, the Zambezi, Mozambique, and Madagascar, their regular exploitation presents the greatest difficulties. Those in Burma, China, Cochinchina, Japan, and Central Asia will be exhausted fairly soon. The British will certainly have drained Australia of its coal resources, buried quite abundantly in its soil, before the day when coal becomes scarce in the United Kingdom. By that time, the Carboniferous veins of Europe, reached to their very last seams, will have already been abandoned.

Consider the following figures to illustrate the quantities of coal consumed since the discovery of the first deposits. The coalfields of

Russia, Saxony, and Bavaria cover 600,000 hectares; those of Spain, 150,000; and those of Bohemia and Austria, 150,000. The Belgian coalfields, 40 leagues long and 3 leagues wide, also cover 150,000 hectares, extending beneath the territories of Liège, Namur, Mons, and Charleroi. In France, the basin located between the Loire and the Rhône, Rive-de-Gier, Saint-Étienne, Givors, Épinac, Blanzy, le Creuzot — the operations of the Gard, Alais, La Grand-Combe, — those of the Aveyron at Aubin — the deposits of Carmaux, Bassac, Graissessac —, in the North, Anzin, Valenciennes, Lens, Béthune, cover approximately three hundred and fifty thousand hectares.

The country richest in coal is undoubtedly the United Kingdom. With the exception of Ireland, which lacks this mineral fuel almost entirely, it possesses enormous coal deposits—but like all resources, they are exhaustible. The most important of these various basins, the Newcastle coalfield, located in the subsoil of Northumberland, produces up to thirty million tons annually, representing nearly a third of English consumption and more than double French production. The Welsh coalfield, which has concentrated a large mining population in Cardiff, Swansea, and Newport, yields ten million tons of this highly sought-after coal that bears its name each year. In the central region, the coalfields of York, Lancaster, Derby, and Stafford are exploited; less productive, but still yielding considerable output. Finally, in this part of Scotland located between Edinburgh and Glasgow, between the two seas that so deeply indent it, lies one of the largest coalfields in the United Kingdom. These various basins together cover no less than sixteen hundred thousand hectares and produce up to one hundred million tons of coal annually.

But what does it matter! Consumption will become so great, for the needs of industry and commerce, that these riches will be exhausted. The third millennium of the Christian era will not be completed before the hand of the miner will have emptied, in Europe, those stores in which, according to a fitting image, the solar heat of the first days was concentrated [2*].

Now, precisely at the time this story takes place, one of the most important coal mines in the Scottish basin had been exhausted by overly rapid exploitation. Indeed, it was in this territory, which extends between Edinburgh and Glasgow, over an average width of ten to twelve miles, that the Aberfoyle coal mine was being excavated, whose works had been directed for so long by the engineer James Starr.

However, for ten years these mines had had to be abandoned. No new deposits had been discovered, although the soundings had been carried

out to a depth of fifteen hundred and even two thousand feet, and when James Starr had withdrawn, it was with the certainty that the thinnest vein had been exploited to complete exhaustion.

It was therefore more than obvious that, under such conditions, the discovery of a new coal basin deep beneath England would have been a momentous event. Did the communication announced by Simon Ford relate to something of this nature? That is what James Starr wondered, that is what he hoped.

In short, was this another corner of those rich Black Indies that he was being called upon to conquer again? He wanted to believe so.

The second letter had momentarily confused his thoughts on the matter, but now he disregarded it. Besides, the old overman's son was there, waiting for him at the appointed meeting place. The anonymous letter was therefore now worthless.

The moment the engineer stepped onto the platform, the young man walked towards him.

"Are you Harry Ford?" James Starr asked him sharply, without any further introduction.

— Yes, Mr. Starr.

— I wouldn't have recognized you, my boy! Ah! It's because, in the last ten years, you've become a man!

“I recognized you,” replied the young miner, holding his hat in his hand. “You haven’t changed, sir. You’re the one who kissed me goodbye at the Dochart pit! You don’t forget things like that!”

"Cover yourself up, Harry," said the engineer. "It's pouring rain, and politeness shouldn't extend to catching a cold."

"Do you want us to take shelter, Mr. Starr?" asked Harry Ford.

— No, Harry. Time is up. It's going to rain all day, and I'm in a hurry. Let's go.

"At your service," replied the young man.

— Tell me, Harry, is Father doing well?

— Very well, Mr. Starr.

— And the mother?...

— The mother too.

— Was it your father who wrote to me, to arrange a meeting at Yarow's well?

— No, it's me.

"But did Simon Ford send me a second letter to cancel this meeting?" the engineer asked sharply.

"No, Mr. Starr," replied the young miner.

"Good!" replied James Starr, without mentioning the anonymous letter any further.

Then, continuing:

"And can you tell me what old Simon wants from me?" he asked the young man.

— Mr. Starr, my father reserved the right to tell you himself.

— But you know that?...

— I know.

"Well, Harry, I won't ask you for anything more. Let's go then, because I'm eager to speak with Simon Ford." "By the way, where does he live?"

— In the mine.

— What! In the Dochart pit?

"Yes, Mr. Starr," replied Harry Ford.

— What! Your family hasn't left the old mine since work stopped?

— Not a day, Mr. Starr. You know the father. That's where he was born, that's where he wants to die!

— I understand that, Harry... I understand that! His native coal mine! He didn't want to abandon it! And you're happy there?...

"Yes, Mr. Starr," replied the young miner, "for we love each other cordially, and we have few needs!"

"Good, Harry," said the engineer. "Let's go!"

And James Starr, following the young man, headed through the streets of Callander.

Ten minutes later, they had both left the city.

[1] It should also be noted that all these plants, whose imprints have been found, belong to species now found only in the equatorial regions of the globe. We can therefore conclude that, at that time, the heat was uniform across the entire Earth, whether it was brought there by currents of hot water or whether internal fires reached its surface through the porous crust. This explains the formation of Carboniferous deposits at all latitudes.

[2]Here, taking into account the increase in coal consumption, is what the latest calculations assign, in Europe, to the depletion of mineral fuels:

France	In 1140	years.
England	— 800	—
Belgium	— 750	—
Germany	— 300	—

In America, at a rate of 500 million tons annually, the deposits could produce coal for 6000 years.

IV

The Dochart pit

Harry Ford was a tall, vigorous, well-built young man of twenty-five. His somewhat serious countenance and habitually pensive demeanor had, from his childhood, set him apart from his fellow miners. His regular features, his deep, gentle eyes, his rather coarse hair, more chestnut

than blond, and his natural charm all combined to make him the quintessential Lowlander, that is to say, a superb specimen of the Scottish lowlander. Hardened almost from a young age by the work of the coal mine, he was, at the same time, a stalwart companion and a good-natured fellow. Guided by his father and driven by his own instincts, he had worked hard and educated himself early, and at an age when most are little more than apprentices, he had managed to make a name for himself—one of the foremost of his class—in a country with few ignorant people, for it does everything to eradicate ignorance. Although, during the early years of his adolescence, the pickaxe never left Harry Ford's hand, the young miner soon acquired the knowledge necessary to rise through the ranks of the coal mine, and he would certainly have succeeded his father as foreman of the Dochart pit, had the mine not been abandoned.

James Starr was still a good walker, and yet he would not have easily followed his guide if the latter had not moderated his pace.

The rain was falling with less force. The large drops were pulverized before reaching the ground. They were more like damp gusts, racing through the air, lifted by a cool breeze.

Harry Ford and James Starr—the young man carrying the engineer's light baggage—followed the left bank of the river for about a mile. After skirting its winding shore, they turned onto a road that led inland beneath tall, dripping trees. Vast pastures stretched out on either side, around isolated farmhouses. A few flocks grazed peacefully on the evergreen grass of these meadows of lower Scotland. They were hornless cows, or small, silky-wooled sheep, resembling those in children's sheepfolds. No shepherd was to be seen, no doubt sheltered in some hollow tree; but the collie, a dog peculiar to this part of the United Kingdom and renowned for its vigilance, prowled around the pasture.

The Yarow pit was located about four miles from Callander. James Starr, as he walked, couldn't help but be impressed. He hadn't seen the countryside since the last ton of coal from the Aberfoyle mines had been loaded onto the Glasgow railway wagons. Farm life was now replacing the ever-noisier, ever-busier industrial life. The contrast was all the more striking because, during the winter, farm work came to a standstill. But in the past, in every season, the miners, both above and below ground, brought life to this land. The great coal wagons passed by day and night. The rails, now buried on their rotten sleepers, creaked under the weight of the wagons. Now, the road of stone and

earth was gradually replacing the old mine tramways. James Starr felt as if he were crossing a desert.

The engineer looked around him with a sad expression. He paused occasionally to catch his breath. He listened. The air was no longer filled with the distant whistling and panting clatter of the machines. On the horizon, not one of those blackish vapors that industrialists love to see, mingled with the great clouds. No tall cylindrical or prismatic chimney belching smoke after drawing its fuel from the coal seam itself, no exhaust pipe straining to expel its white steam. The ground, once soiled by coal dust, had a clean appearance, to which James Starr's eyes were no longer accustomed.

When the engineer stopped, Harry Ford stopped too. The young miner waited in silence. He sensed what was going on in his companion's mind, and he keenly shared this feeling—he, a child of the coal mine, whose whole life had been spent in the depths of this earth.

“Yes, Harry, all that has changed,” said James Starr. “But, by taking so much from it, the coal reserves had to run out one day! You miss those days!”

"I'm sorry, Mr. Starr," replied Harry. "The work was hard, but it was interesting, like any struggle."

— No doubt, my boy! The constant struggle, the danger of landslides, fires, floods, and firedamp explosions that strike like lightning! We had to prepare for these perils! You're right! It was a struggle, and consequently, a thrilling life!

— The miners of Alloa were more favored than the miners of Aberfoyle, Mr. Starr!

"Yes, Harry," replied the engineer.

"Truly," exclaimed the young man, "it is a pity that the entire globe was not made of coal alone! There would have been enough for millions of years!"

— No doubt, Harry, but it must be admitted, however, that nature has shown itself to be provident in forming our spheroid more mainly of sandstone, limestone, granite, which fire cannot consume!

— Do you mean, Mr. Starr, that humans would have ended up burning their globe?...

"Yes! All of it, my boy," replied the engineer. "The earth would have passed, down to the last piece, into the furnaces of locomotives, steam engines, steamers, gasworks, and certainly, that is how our world would have ended one fine day!"

"That's no longer a concern, Mr. Starr. But also, the coal mines will undoubtedly be depleted more quickly than the statistics indicate!"

"It will happen, Harry, and, in my opinion, England may be wrong to trade its fuel for the gold of other nations!"

"Indeed," replied Harry.

“I know full well,” added the engineer, “that neither hydraulics nor electricity have yet had their final say, and that one day these two forces will be used more fully. But no matter! Coal is very practical and readily lends itself to the various needs of industry! Unfortunately, humans cannot produce it at will! While outdoor forests constantly regrow under the influence of heat and water, inland forests do not regenerate, and the globe will never again be in the conditions necessary for their regeneration!”

James Starr and his guide, while chatting, had resumed their brisk walk. An hour after leaving Callander, they arrived at the Dochart pit.

Even an indifferent person would have been moved by the sad appearance of the abandoned establishment. It was like the skeleton of what had once been so vibrant.

In a vast area, bordered by a few sparse trees, the ground was still hidden under the black dust of the mineral fuel, but there were no more cinders, no more lumps of coal, no more fragments of coal to be seen. Everything had been removed and consumed long ago.

On a low hill, the silhouette of an enormous framework stood out, slowly being eroded by the sun and rain. At the top of this framework appeared a vast cast-iron wheel or pulley, and lower down were rounded those large drums, around which the cables that once brought the cages back to the surface of the ground were wound.

On the lower level, one could recognize the dilapidated engine room, once so gleaming in the steel or copper parts of the mechanism. Some sections of wall lay on the ground amidst broken joists, green with damp. Remains of counterweights to which the shafts of the drainage pumps were articulated, broken or clogged bearings, toothless pinions, overturned tipping mechanisms, a few rungs fixed to the trestles

resembling the great spines of ichthyosaurs, rails carried on some broken sleeper still supported by two or three shaky piles, tramways that would not have withstood the weight of an empty wagon—such was the desolate aspect of the Dochart pit.

The wellheads, with their weathered stones, were disappearing under thick moss. Here, one could recognize the remains of a cage, there the remnants of a coal yard where coal was stored, to be sorted according to its quality or size. Finally, debris from barrels with a piece of chain dangling from them, fragments of gigantic trestles, sheets of metal from a gutted boiler, twisted pistons, long counterweights leaning over the openings of the pump shafts, footbridges trembling in the wind, culverts quivering at their base, cracked walls, half-collapsed roofs towering over chimneys with disjointed bricks, resembling those modern cannons whose breech is encircled by cylindrical rings—from all this emerged a vivid impression of abandonment, misery, and sadness, which neither the ruins of the old stone castle nor the remains of a dismantled fortress offer.

"It's a disaster!" said James Starr, looking at the young man who did not respond.

They both then entered under the lean-to that covered the opening of the Yarow shaft, whose ladders still gave access to the lower galleries of the pit.

The engineer leaned over the opening.

From there once poured the powerful blast of air drawn in by the fans. Now it was a silent abyss. It seemed as if one were at the mouth of some extinct volcano.

James Starr and Harry stepped onto the first landing.

At the time of the operation, ingenious machines served certain shafts of the Aberfoyle coal mines, which, in this respect, were perfectly equipped: cages fitted with automatic parachutes, biting onto wooden slides, oscillating ladders, called "engine-men", which, by a simple oscillating movement, allowed miners to descend safely or ascend without fatigue.

But these sophisticated devices had been removed since work ceased. All that remained in the Yarow shaft was a long series of ladders, separated by narrow landings every fifty feet. Thirty of these ladders, placed end to end, allowed access to the floor of the lower gallery, at a depth of fifteen hundred feet. This was the only means of

communication between the bottom of the Dochart pit and the surface. Ventilation was provided by the Yarow shaft, which the galleries connected to another shaft whose opening was at a higher level—the warm air escaping naturally through this kind of inverted siphon.

"I'll follow you, my boy," said the engineer, beckoning the young man to go ahead of him.

— At your service, Mr. Starr.

— Do you have your lamp?

— Yes, and would to Heaven that it was still the safety lamp we used to use!

“Indeed,” replied James Starr, “firedamp explosions are no longer a concern now!”

Harry carried only a simple oil lamp, whose wick he lit. In the coal mine, empty of coal, leaks of hydrogen procarbonate gas could no longer occur. Therefore, there was no explosion to fear, and no need to place the wire mesh between the flame and the surrounding air to prevent the gas from igniting outside. Davy's lamp, so sophisticated at the time, was now useless here. But if the danger was gone, it was because the cause had disappeared, and with that cause, the fuel that had once been the source of the Dochart pit's wealth.

Harry descended the first few rungs of the upper ladder. James Starr followed him. They soon found themselves in a profound darkness, broken only by the glare of the lamp. The young man raised it above his head to better illuminate his companion.

The engineer and his guide descended about ten ladders at the measured pace typical of miners. They were still in good condition.

James Starr curiously observed what the insufficient light allowed him to see of the walls of the dark well, which was still covered by a half-rotten wooden lining.

Having reached the fifteenth level, that is to say halfway there, they stopped for a few moments.

"I certainly don't have your legs, my boy," said the engineer, taking a long breath, "but well, it's still alright!"

"You're tough, Mr. Starr," replied Harry, "and it's something, you see, to have lived in the mine for so long."

"You're right, Harry. Back in my day, when I was twenty, I would have downed it all in one go. Come on, let's go!"

But, just as they were about to leave the landing, a voice, still distant, was heard from the depths of the well. It arrived like a sound wave that gradually swells, and it became more and more distinct.

"Hey! Who's here?" asked the engineer, stopping Harry.

"I couldn't say," replied the young miner.

— Isn't that the old man?...

— Him! Mr. Starr, no.

— Some neighbor, then?...

"We have no neighbors down the pit," replied Harry. "We are alone, very alone."

“Good! Let’s let this intruder through,” said James Starr. “Those going down must give way to those going up.”

They both waited.

The voice resonated at that moment with a magnificent brilliance, as if it had been carried by a vast acoustic pavilion, and soon a few words of a Scottish song reached the young miner's ears quite clearly.

"The Song of the Lakes!" cried Harry. "Ah! I would be very surprised if it came from anyone other than Jack Ryan's mouth."

"And who is this Jack Ryan who sings so superbly?" asked James Starr.

"An old comrade from the coal mine," replied Harry.

Then, hanging above the landing:

"Hey! Jack!" he shouted.

"Is that you, Harry?" came the reply. "Wait for me, I'm coming."

And the song started up again, even louder than before.

A few moments later, a tall boy of twenty-five, with a cheerful face, smiling eyes, a joyful mouth, and fiery blond hair, appeared at the bottom of the cone of light projected by his lantern, and he stepped onto the landing of the fifteenth ladder.

His first act was to vigorously shake the hand that Harry had just extended to him.

"Delighted to meet you!" he exclaimed. "But, Saint Mungo, protect me! If I had known you were coming back to land today, I would have spared myself this descent to the Yarow well!"

"Mr. James Starr," said Harry then, turning his lamp towards the engineer, who had remained in the shadows.

"Mr. Starr!" replied Jack Ryan. "Ah! Mr. Engineer, I wouldn't have recognized you. Since I left the pit, my eyes are no longer used to seeing in the dark as they once were."

— And I now remember a kid who was always singing. That was about ten years ago, my boy! It was you, no doubt?

— Me, Mr. Starr, and, in changing my profession, I haven't changed my mood, you see? Bah! Laughing and singing, that's better, I suppose, than crying and whining!

— No doubt, Jack Ryan. — And what have you been doing since you left the mine?

— I work at Melrose Farm, near Irvine, in County Renfrew, forty miles from here. Ah! It's no match for our Aberfoyle coal mines! The pick was better suited to my hand than the spade or the goad! And besides, down in the old pit, there were resonant corners, cheerful echoes that cheerfully sent your songs back to you, while up there!... But you are going to visit old Simon, Mr. Starr?

"Yes, Jack," replied the engineer.

— That I don't delay you...

"Tell me, Jack," asked Harry, "what brought you to the cottage today?"

"I wanted to see you, comrade," replied Jack Ryan, "and invite you to the Irvine clan's party. You know, I'm the local piper! We'll sing and dance!"

— Thank you, Jack, but that's impossible for me.

- Impossible ?

— Yes, Mr. Starr's visit may be extended, and I must take him back to Callander.

"Hey, Harry, Irvine's clan party isn't for another eight days. By then, Mr. Starr's visit will be over, I suppose, and nothing will be keeping you at the cottage anymore!"

"Indeed, Harry," replied James Starr. "You must take advantage of the invitation your friend Jack has extended to you!"

"Well, I accept, Jack," said Harry. "In eight days, we'll meet at Irvine's party."

"In eight days, that's agreed," replied Jack Ryan. "Goodbye, Harry! Yours truly, Mr. Starr! I'm so glad to see you again! I'll be able to give news of you to our friends. No one has forgotten you, Mr. Engineer."

"And I haven't forgotten anyone," said James Starr.

"Thank you for everything, sir," replied Jack Ryan.

"Goodbye, Jack!" said Harry, squeezing his friend's hand one last time.

And Jack Ryan, resuming his song, soon disappeared into the heights of the well, dimly lit by his lamp.

A quarter of an hour later, James Starr and Harry descended the last ladder and set foot on the floor of the last level of the pit.

Around the circular shape formed by the bottom of the Yarow shaft radiated various galleries that had been used to exploit the mine's last Carboniferous vein. They plunged into the schist and sandstone massif, some braced by trapezoidal frames of roughly hewn beams, others lined with a thick stone facing. Everywhere, backfill replaced the veins devoured by the mining operations. The artificial pillars were made of stones quarried from nearby quarries, and now they supported the ground—that is, the two layers of Tertiary and Quaternary strata that once rested directly on the deposit. Darkness then filled these galleries, formerly lit either by the miner's lamp or by electric light, which had been introduced into the pits in recent years. But the dark tunnels no longer echoed with the squeaking of the wagons rolling on their rails, nor with the noise of the air doors closing abruptly, nor with the shouts of the wheelers, nor with the neighing of the horses and mules, nor

with the blows of the worker's pick, nor with the crash of the blast that shattered the massif.

"Would you like to rest for a moment, Mr. Starr?" asked the young man.

"No, my boy," replied the engineer, "for I am in a hurry to get to old Simon's cottage."

— Follow me then, Mr. Starr. I will guide you, and yet I am sure that you would perfectly recognize your way in this dark maze of galleries.

"Yes, of course! I still have the whole plan of the old pit in my head."

Harry, followed by the engineer and raising his lamp to better illuminate the way, descended into a high gallery, resembling a cathedral's nave. Both their feet still bumped against the wooden sleepers that had supported the rails during the railway's operation.

But they had barely taken fifty steps when an enormous stone fell at James Starr's feet.

"Watch out, Mr. Starr!" Harry cried, grabbing the engineer's arm.

— A stone, Harry! Ah! These old vaults aren't strong enough anymore, no doubt, and...

"Mr. Starr," replied Harry Ford, "it seems to me that the stone was thrown... and thrown by a human hand!"

"Thrown away!" cried James Starr. "What do you mean, my boy?"

“Nothing, nothing… Mr. Starr,” replied Harry evasively, his gaze turning serious as if he wanted to pierce those thick walls. “Let’s continue on our way. Please take my arm, and don’t worry about making a mistake.”

"Here I am, Harry!"

And they both advanced, while Harry looked back, casting the light of his lamp into the depths of the gallery.

"Will we arrive soon?" asked the engineer.

— In ten minutes at most.

- GOOD.

"But," Harry murmured, "it's still quite strange. It's the first time anything like this has ever happened to me. That stone had to fall just as we were passing by!"

— Harry, it was just a coincidence!

"A coincidence..." replied the young man, shaking his head. "Yes... a coincidence..."

Harry had stopped. He was listening.

"What is it, Harry?" asked the engineer.

"I thought I heard walking behind us," replied the young miner, who listened more attentively.

Then :

"No! I must have been mistaken," he said. "Lean firmly on my arm, Mr. Starr. Use me as a stick..."

“A sturdy stick, Harry,” replied James Starr. “There’s no better one than a brave lad like yourself!”

They both continued walking silently through the dark nave.

Often, Harry, obviously preoccupied, would turn around, trying to catch either a distant noise or some far-off glimmer.

But behind and before him, all was silence and darkness.

[1] The *piper* is the bagpipe player in Scotland.

V

The Ford Family

Ten minutes later, James Starr and Harry finally emerged from the main gallery.

The young miner and his companion had reached the bottom of a clearing—if such a word can be used to describe a vast, dark excavation. This excavation, however, was not entirely devoid of light. A few rays reached it through the opening of an abandoned shaft, which had been sunk into the upper levels. It was through this shaft that the ventilation current for the Dochart pit was established. Thanks to its

lower density, the warm air from inside was drawn up towards the Yarow shaft.

So, a little air and light penetrated both through the thick schist vault to the clearing.

This was where Simon Ford had lived for ten years, with his family, in an underground dwelling, carved into the schist massif, in the very place where the powerful machines used to operate the mechanical traction of the Dochart pit.

Such was the dwelling—which he readily called a "cottage"—where the old overman resided. Thanks to a certain comfort, resulting from a long life of work, Simon Ford could have lived in full sunshine, among the trees, in any town in the kingdom; but he and his family had preferred not to leave the coal mine, where they were happy, sharing the same ideas and tastes. Yes! They liked this cottage, buried fifteen hundred feet below the Scottish soil. Among other advantages, there was no fear of the tax collectors, the "stentmaters" charged with assessing the poll tax, ever coming to bother its inhabitants!

At that time, Simon Ford, the former overman of the Dochart pit, still bore his sixty-five years vigorously. Tall, robust, well-built, he would have been regarded as one of the most remarkable "sawneys [1*]" of the canton, which supplied so many fine men to the Highland regiments.

Simon Ford came from an old family of miners, and his genealogy went back to the early days when the Carboniferous deposits in Scotland were exploited.

Without delving into archaeological research to determine whether the Greeks and Romans used coal, or whether the Chinese were mining coal well before the Christian era, and without debating whether the mineral fuel truly owes its name to the blacksmith Houillos, who lived in Belgium in the 12th century, we can assert that the coalfields of Great Britain were the first to be systematically exploited. As early as the 11th century, William the Conqueror was distributing the products of the Newcastle coalfield among his companions-in-arms. In the 13th century, a license to mine "marine coal" was granted by Henry III. Finally, towards the end of the same century, deposits in Scotland and Wales are mentioned.

It was around this time that Simon Ford's ancestors descended into the bowels of the Caledonian soil, never to emerge again, from father to son. They were merely laborers. They toiled like convicts extracting the precious fuel. It is even believed that the coal miners, like the salt workers of that era, were essentially slaves. Indeed, in the 18th century, this opinion was so firmly established in Scotland that, during the Pretender's War, there were fears that twenty thousand Newcastle miners might rise up to reclaim a freedom they didn't believe they possessed.

In any case, Simon Ford was proud to belong to that great family of Scottish coal miners. He had worked with his own hands, in the very places where his ancestors had wielded the pick, the tongs, the rake, and the shovel. At thirty, he was the foreman of the Dochart pit, the largest of the Aberfoyle coalfields. He loved his job passionately. For many years, he carried out his duties with zeal. His only sorrow was seeing the seam deplete and anticipating the imminent arrival of the mine's exhaustion.

It was then that he devoted himself to searching for new veins in all the Aberfoyle pits, which were interconnected underground. He had the good fortune to discover a few during the last period of operation. His miner's instinct served him wonderfully, and the engineer James Starr greatly appreciated him. It was as if he could divine the deposits in the bowels of the coal mine, like a hydroscope divines springs beneath the soil.

But the time came, as we have said, when the coal mine completely ran out of fuel. Drilling yielded no further results. It became clear that the coal seam was entirely exhausted. Mining operations ceased. The miners withdrew.

Would you believe it? It was a source of despair for most. Anyone who knows that, deep down, man loves his suffering will not be surprised. Simon Ford, without a doubt, was the most affected. He was, par excellence, the miner whose existence is inextricably linked to that of his mine. Since birth, he had lived there constantly, and when the work was abandoned, he wanted to stay. So he remained. Harry, his son, was put in charge of supplying the underground dwelling; but as for him, he hadn't been back up to the surface ten times in ten years.

"Go up there! What's the point?" he repeated, and he did not leave his dark domain.

In this perfectly healthy environment, moreover, subject to a consistently moderate temperature, the old overman knew neither the heat of summer nor the cold of winter. His family was doing well. What more could he desire?

Deep down, he was seriously saddened. He missed the activity, the movement, the life of the past, in the pit so painstakingly worked. However, he was sustained by a fixed idea.

"No! No! The coal mine is not exhausted!" he repeated.

And he would have made a bad choice, who would have doubted to Simon Ford that the old Aberfoyle would ever rise from the dead! He had never given up hope of discovering some new seam that would restore the mine to its former glory. Yes! He would gladly have taken up the miner's pick again, if need be, and his old arms, still strong, would have vigorously attacked the rock. So he went through the dark tunnels, sometimes alone, sometimes with his son, observing, searching, returning each day tired, but not despairing, to the cottage.

Simon Ford's worthy companion was Madge, tall and strong, the "goodwife," the "good woman," as the Scottish expression goes. Like her husband, Madge would not have wanted to leave the Dochart pit. In this respect, she shared all his hopes and regrets. She encouraged him, she urged him on, she spoke to him with a kind of gravity that warmed the old overman's heart.

"Aberfoyle is only asleep, Simon," she told him. "You're right. It's only rest, it's not death!"

Madge also knew how to do without the outside world and concentrate the happiness of a three-person existence in the dark cottage.

That's when James Starr arrived.

The engineer was expected. Simon Ford, standing on his doorstep, as far away as Harry's lamp had announced the arrival of his former "viewer", stepped towards him.

"Welcome, Mr. James!" he called out, his voice echoing beneath the shale arch. "Welcome to the old overman's cottage! Though buried fifteen hundred feet underground, the Ford family home is no less hospitable!"

"How are you, brave Simon?" asked James Starr, shaking the hand his host extended to him.

— Very well, Mr. Starr. And how could it be otherwise here, sheltered from all inclement weather? Your ladies who go to breathe in Newhaven or Portobello [2*] during the summer would do better to spend a few months in the Aberfoyle coal mine! They would not risk catching a bad cold there, as in the damp streets of the old capital.

"I won't contradict you, Simon," replied James Starr, delighted to see the overman as he once was! "Really, I wonder why I don't trade my house on Canongate for some cottage near yours!"

— At your service, Mr. Starr. I know one of your former miners who would be particularly delighted to have only a party wall between you and him.

"And Madge?" asked the engineer.

"The old woman is even better off than I am, if that's possible!" replied Simon Ford, "and she's delighted to have you at her table. I think she'll have gone to great lengths to receive you."

"We'll see about that, Simon, we'll see about that!" said the engineer, who could not be indifferent to the prospect of a good lunch after this long walk.

— Are you hungry, Mr. Starr?

— Positively hungry. The journey has whetted my appetite. I arrived in dreadful weather!...

"Ah! It's raining up there!" replied Simon Ford with a very marked look of pity.

— Yes, Simon, and the waters of the Forth are as rough as the sea today!

“Well, Mr. James, it never rains here. But I don’t need to describe advantages you know as well as I do! You’ve arrived at the cottage. That’s the main thing, and, I repeat, welcome!”

Simon Ford, followed by Harry, brought James Starr into the house, who found himself in the middle of a vast room, lit by several lamps, one of which was suspended from the colored beams of the ceiling.

The table, covered with a tablecloth enlivened with fresh colors, was just waiting for the guests, for whom four chairs, upholstered in old leather, were reserved.

"Hello, Madge," said the engineer.

"Good morning, Mr. James," replied the kind Scottish woman, who rose to receive her guest.

— It's a pleasure to see you again, Madge.

— And you are right, Mr. James, for it is pleasant to see again those to whom one has always been kind.

"The soup's waiting, woman," said Simon Ford, "and we mustn't keep it waiting, nor Mr. James. He's as hungry as a miner, and he'll see that our boy doesn't let us want for anything at the cottage!" "By the way, Harry," added the old overman, turning to his son, "Jack Ryan came to see you."

— I know, Father! We met him in the Yarow well.

“He’s a good, cheerful fellow,” said Simon Ford. “But he seems quite happy up there! He didn’t have any real miner’s blood in his veins.” “Come to the table, Mr. James, and let’s have a hearty lunch, for it’s possible we won’t be able to have supper until very late.”

Just as the engineer and his guests were about to take their seats:

"One moment, Simon," said James Starr, "do you want me to eat with a good appetite?"

"That will be doing us the greatest honor, Mr. James," replied Simon Ford.

— Well, for that you have to have no worries. — Now, I have two questions to ask you.

— Come on, Mr. James.

— Your letter mentions a communication that should be of interest to me?

— It is very interesting, indeed.

- For you ?...

— For you and for me, Mr. James. But I wish to tell it to you only after the meal and right here. Otherwise, you wouldn't believe me.

"Simon," the engineer resumed, "look at me closely... there... in the eyes. An interesting communication?... Yes... Good!... I won't ask you for anything more," he added, as if he had read the answer he hoped for in the old overman's eyes.

— And the second question? he asked.

"Do you know, Simon, who could have written this to me?" replied the engineer, presenting the anonymous letter he had received.

Simon Ford took the letter, and he read it very carefully.

Then, showing it to his son:

"Do you know this script?" he said.

"No, Father," replied Harry.

"And this letter was postmarked from the Aberfoyle post office?" Simon Ford asked the engineer.

— Yes, like yours, replied James Starr.

"What do you think of that, Harry?" said Simon Ford, whose brow darkened for a moment.

"I think, Father," replied Harry, "that someone had some interest in preventing Mr. James Starr from coming to the meeting you gave him."

"But who?" cried the old miner. "Who could have penetrated so deeply into the secret of my thoughts?"

And Simon Ford, lost in thought, fell into a reverie from which Madge's voice soon pulled him.

"Let's sit down, Mr. Starr," she said. "The soup will get cold. For now, let's not think about that letter!"

And, at the old woman's invitation, everyone took their place at the table — James Starr opposite Madge, to honor her — father and son opposite each other.

It was a good Scottish meal. And first, they ate "hotchpotch," a soup in which the meat simmered in an excellent broth. According to old Simon, his wife knew no rival in the art of preparing hotchpotch.

The same was true, moreover, of the "cockyleeky", a kind of rooster stew, prepared with leeks, which deserved nothing but praise.

The whole thing was washed down with an excellent ale, sourced from the best brews of Edinburgh's factories.

But the main course consisted of haggis, the national pudding made of meat and barley flour. This remarkable dish, which inspired the poet Burns to write one of his finest odes, suffered the fate reserved for the beautiful things of this world: it passed like a dream.

Madge received sincere compliments from her host.

Lunch ended with a dessert of cheese and finely prepared oatcakes, accompanied by a few small glasses of Usquebaugh, an excellent grain spirit, which was twenty-five years old — just Harry's age.

This meal lasted a good hour. James Starr and Simon Ford had not only eaten well, they had also talked well — mainly about the history of the old Aberfoyle coal mine.

Harry, for his part, had remained mostly silent. Twice he had left the table and even the house. It was clear he had been feeling some unease since the incident with the stone, and he wanted to observe the area around the cottage. The anonymous letter hadn't exactly reassured him either.

It was during one of these outings that the engineer said to Simon Ford and Madge:

"What a fine young man you have there, my friends!"

"Yes, Mr. James, a good and devoted man," replied the old overman briskly.

— Is he enjoying himself with you at the cottage?

— He wouldn't want to leave us.

— You will consider marrying him off, though?

"Marry Harry!" cried Simon Ford. "And to whom? To some girl from up there, who would love parties and dancing, who would prefer her clan to our coal mine! Harry wouldn't want that!"

"Simon," Madge replied, "you won't demand that our Harry never take a wife..."

“I won’t demand anything,” replied the old miner, “but there’s no rush! Who knows if we won’t find him something…”

Harry was coming home at that moment, and Simon Ford fell silent.

When Madge got up from the table, everyone imitated her and came to sit for a moment at the door of the cottage.

"Well, Simon," said the engineer, "I'm listening!"

"Mr. James," replied Simon Ford, "I don't need your ears, I need your legs." "Have you rested well?"

— Well rested and refreshed, Simon. I am ready to accompany you wherever you wish.

— Harry, said Simon Ford, turning to his son, turn on our safety lamps.

"You're taking safety lamps!" exclaimed James Starr, quite surprised, since firedamp explosions were no longer a concern in a pit completely empty of coal.

— Yes, Mr. James, as a precaution!

— Aren't you also going to suggest, my good Simon, that I put on a miner's outfit?

"Not yet, Mr. James! Not yet!" replied the old overman, whose eyes shone singularly beneath their deep sockets.

Harry, who had gone back into the cottage, came out again almost immediately, bringing back three safety lamps.

Harry handed one of the lamps to the engineer, another to his father, and kept the third hanging from his left hand, while his right hand armed itself with a long stick.

"Let's go!" said Simon Ford, who picked up a sturdy pickaxe, which had been placed at the door of the cottage.

"Let's go!" replied the engineer. "Goodbye, Madge!"

"God help you!" replied the Scottish woman.

"A good supper, woman, you hear?" cried Simon Ford. "We'll be hungry when we get back, and we'll do it justice!"

[1] Sawney is the Scotsman, just as John Bull is the Englishman, and Paddy the Irishman.

[2] Seaside resorts in the vicinity of Edinburgh.

VI

Some inexplicable phenomena

We know what superstitious beliefs are in the highlands and lowlands of Scotland. In some clans, the laird's tenants, gathered for the evening, like to retell tales borrowed from the repertoire of Hyperborean mythology. Education, though widespread and liberally disseminated throughout the country, has not yet been able to reduce these legends, which seem inherent to the very soil of ancient Caledonia, to the status of mere fiction. It is still the land of spirits and ghosts, of goblins and fairies. There always appear the malevolent spirit who only leaves for a price, the "Seer" of the Highlanders, who, with a gift of second sight, predicts impending deaths, the "May Moullach", who appears in the form of a young girl with hairy arms and warns families of the misfortunes that threaten them, the fairy "Branshie", who announces disastrous events, the "Brawnies", to whom the guarding of domestic furniture is entrusted, the "Urisk", who frequents more particularly the wild gorges of Lake Katrine, — and so many others.

It goes without saying that the population of the Scottish coal mines would contribute its share of legends and fables to this mythological repertoire. If the Highland mountains are populated by chimeric beings, good or bad, how much more must the dark coal mines have been haunted to their very depths. Who makes the coal seam tremble during stormy nights, who leads to the untapped vein, who ignites the firedamp and presides over the terrible explosions, if not some mine spirit? This, at least, was the commonly held opinion among these superstitious Scots. In truth, most miners readily believed in the fantastic when it concerned purely physical phenomena, and it would have been a waste of time trying to disabuse them of this notion. Where could credulity have flourished more freely than in the depths of these abysses?

Now, the Aberfoyle coal mines, precisely because they were exploited in the land of legends, were more naturally suited to all kinds of supernatural incidents.

So legends abounded there. It must be said, moreover, that certain phenomena, unexplained until then, could only provide further fuel for public credulity.

At the forefront of the superstitious crowd in Dochart Pit was Jack Ryan, Harry's friend. He was the greatest believer in the supernatural. He

turned all these fantastic stories into songs, which brought him considerable success during winter evenings.

But Jack Ryan wasn't the only one displaying his credulity. His companions asserted, no less emphatically, that the Aberfoyle pits were haunted, that certain elusive beings frequently appeared there, as happened in the Highlands. According to them, what would have been truly extraordinary would have been if it weren't so. Indeed, was there a more suitable environment than a dark and deep coal mine for the frolicking of genies, goblins, sprites, and other actors in fantastic dramas? The stage was all set; why shouldn't the supernatural characters have come to play their part?

This was the reasoning of Jack Ryan and his comrades from the Aberfoyle coal mines. It was said that the different pits communicated with each other through long underground galleries, built between the seams. Thus, beneath Stirling County, there existed an enormous massif, crisscrossed with tunnels, riddled with cellars, drilled with shafts, a kind of hypogeum, a subterranean labyrinth, which gave the appearance of a vast anthill.

The miners from the various mines often met, either on their way to or from the workings. This facilitated the constant exchange of stories and the transmission of coal-related tales from one pit to another. The stories spread with remarkable speed, passing from mouth to mouth and growing accordingly.

However, two men, more educated and of a more positive temperament than the others, had always resisted this training. They did not accept, to any degree, the intervention of goblins, genies, or fairies.

It was Simon Ford and his son. And they proved it by continuing to live in the dark crypt after the Dochart pit was abandoned. Perhaps good Madge had some inclination towards the supernatural, like any Highland Scot. But these stories of apparitions, she was reduced to telling them to herself—which she did conscientiously, moreover, so as not to lose the old traditions.

Had Simon and Harry Ford been as credulous as their comrades, they would not have abandoned the coal mine to either genies or fairies. The hope of discovering a new vein would have made them brave the entire fantastic cohort of goblins. They were credulous, they were believers, only on one point: they could not accept that the Aberfoyle coal seam was completely exhausted. It can be said, with some accuracy, that

Simon Ford and his son had, on this matter, "the faith of a coal miner," that faith in God that nothing can shake.

That is why, for ten years, without missing a single day, obstinate and unwavering in their convictions, the father and son took up their pickaxe, their stick, and their lamp. They went on together, searching, probing the rock with a sharp blow, listening to see if it gave a favorable sound.

Until the drilling reached the granite of the primary rock, Simon and Harry Ford agreed that the exploration, useless today, could be useful tomorrow, and that it should be resumed. They would dedicate their entire lives to trying to restore the Aberfoyle coal mine to its former prosperity. Should the father succumb before achieving success, the son would take up the task alone.

At the same time, these two passionate guardians of the coal mine inspected it from a preservation standpoint. They checked the solidity of the embankments and vaults. They assessed whether a collapse was imminent and whether it was becoming urgent to seal off any part of the pit. They examined traces of seepage from the surface water, diverting and channeling it to a sump. In short, they had voluntarily appointed themselves the protectors and guardians of this unproductive domain, from which so much wealth had once flowed, now dissolved into smoke!

It was during some of these excursions that Harry, in particular, happened to be struck by certain phenomena, the explanation for which he sought in vain.

Thus, several times, when he followed some narrow counter-gallery, he seemed to hear noises similar to those that could have been produced by violent blows of a pickaxe, struck on the backfilled wall.

Harry, whom neither the supernatural nor the natural could frighten, had quickened his pace to surprise the cause of this mysterious work.

The tunnel was deserted. The young miner's lamp, moved along the wall, had revealed no recent marks from pliers or picks. Harry wondered, therefore, if he was not the victim of an acoustic illusion, of some strange or whimsical echo.

At other times, by suddenly shining a bright light towards a suspicious crevice, he thought he saw a shadow pass by. He rushed forward... Nothing, even though no escape route would have allowed a human being to flee his pursuit!

Twice in the past month, Harry, while visiting the western part of the pit, distinctly heard distant detonations, as if some miner had set off a stick of dynamite.

Last time, after meticulous research, he had recognized that a pillar had just been ripped open by a blast from a mine.

By the light of his lamp, Harry carefully examined the face damaged by the mine. It wasn't simply a pile of stones, but a section of shale that had penetrated to that depth into the coal seam. Had the blast been intended to uncover a new vein? Or had they only wanted to cause this part of the mine to collapse? This is what Harry wondered, and when he told his father, neither he nor the old foreman could find a satisfactory answer.

“It’s strange,” Harry often repeated. “The presence of an unknown being in the mine seems impossible, and yet it cannot be doubted! What would someone else want to look for if there isn’t still some exploitable vein? Or rather, wouldn’t they be trying to destroy what remains of the Aberfoyle coalfields? But to what end? I’ll know when it costs me my life!”

Two weeks before that day, when Harry Ford was guiding the engineer through the maze of the Dochart pit, he had seen himself on the verge of reaching the goal of his research.

He was traveling around the southwestern end of the coal mine, a powerful lantern in his hand.

Suddenly, it seemed to him that a light had gone out a few hundred feet ahead, deep inside a narrow chimney that cut obliquely into the mountain range. He rushed towards the suspicious glow...

The search was futile. Since Harry refused to accept any supernatural explanation for physical phenomena, he concluded that, surely, an unknown being was lurking in the pit. But, no matter what he did, searching with the utmost care, scrutinizing every nook and cranny of the gallery, he was in vain and could not arrive at any certainty.

So Harry relied on chance to unravel this mystery. From time to time, he saw glimmers appear, flitting from one point to another like St. Elmo's fire; but their appearance lasted only a flash, and he had to give up trying to discover their cause.

If Jack Ryan and the other superstitious people in the coal mine had seen these fantastic flames, they certainly would have cried

"supernatural!"

But Harry didn't even consider it. Neither did old Simon. And when the two of them were discussing these phenomena, obviously due to a purely physical cause:

"My boy," replied the old overman, "let's wait! All this will be explained one day!"

However, it should be noted that until then, neither Harry nor his father had ever been the victim of an act of violence.

If the stone, which fell that very day at James Starr's feet, had been thrown by the hand of a criminal, it would have been the first criminal act of its kind.

When questioned, James Starr suggested that the stone had broken loose from the gallery's vault. But Harry didn't accept such a simple explanation. According to him, the stone hadn't fallen; it had been thrown. Unless it had bounced, it would never have followed a trajectory if it hadn't been propelled by an external force.

Harry therefore saw this as a direct attempt against him and his father, or even against the engineer. After what we know, perhaps we can agree that he had good reason to believe it.

VII

An experiment by Simon Ford

Noon was striking on the old wooden clock in the hall when James Starr and his two companions left the cottage.

The light, filtering through the ventilation shaft, dimly illuminated the clearing. Harry's lamp would have been useless then, but it would soon be needed, for it was to the very end of the Dochart pit that the old overman was going to lead the engineer.

After following the main gallery for two miles, the three explorers—and it will become clear that this was indeed an exploration—arrived at the opening of a narrow tunnel. It was like a side aisle whose vault rested on timbering covered with whitish moss. It roughly followed the line traced, fifteen hundred feet above, by the high course of the River Forth.

In case James Starr was less familiar than before with the maze of the Dochart pit, Simon Ford reminded him of the layout of the general plan, comparing it to the geographical pattern of the ground.

So James Starr and Simon Ford were walking and talking.

Ahead, Harry illuminated the road. He was searching, by suddenly projecting bright flashes of light towards the dark crevices, for some suspicious shadow.

"Will we go far like this, old Simon?" asked the engineer.

"Just half a mile more, Mr. James! In the old days, we would have traveled this route in a coach, on the mechanically pulled trams! But how long ago those days seem!"

"So we're heading towards the end of the last vein?" asked James Starr.

— Yes! I see you still know the mine well.

"Hey Simon," replied the engineer, "it would be difficult to go any further, if I'm not mistaken?"

“Indeed, Mr. James. That’s where our miners extracted the last lump of coal from the deposit! I remember it as if I were still there! I was the one who struck that last blow, and it resounded in my chest more violently than it did against the rock! All around us was nothing but sandstone or shale, and when the mine cart rolled toward the shaft, I followed it, my heart filled with emotion, like one follows a convoy of paupers! It seemed to me that the soul of the mine was going with it!”

The gravity with which the old overman uttered these words impressed the engineer, who was very close to sharing such sentiments. They were the feelings of a sailor abandoning his ship in distress, the feelings of a laird watching his ancestral home being torn down!

James Starr had shaken Simon Ford's hand. But, in turn, Ford had just taken the engineer's hand and squeezed it tightly:

"That day, we were all mistaken," he said. "No! The old coal mine was not dead! It was not a corpse that the miners were going to abandon, and I would dare to say, Mr. James, that its heart still beats!"

"Speak up, Simon! You've discovered a new vein?" exclaimed the engineer, who was beside himself with rage. "I knew it! Your letter couldn't have meant anything else! You have a report for me, and in the

Dochart pit no less! What other discovery than a Carboniferous layer could have interested me?"

"Mr. James," replied Simon Ford, "I didn't want to warn anyone but you..."

— And you did well, Simon! But tell me, how, through what surveys, did you make sure?...

"Listen to me, Mr. James," replied Simon Ford. "It's not a deposit I've found..."

— What is it?

— This is only material proof that this deposit exists.

— And this proof?

— Can you accept that firedamp is released from the bowels of the ground, if coal is not there to produce it?

"No, certainly not!" replied the engineer. "No coal, no firedamp! There are no effects without a cause..."

— Where there's smoke, there's fire!

— And you observed, once again, the presence of protocarbon hydrogen?...

"An old miner wouldn't fall for that," replied Simon Ford. "I recognized our old enemy there, firedamp!"

"But what if it were another gas!" said James Starr. "Fired gas is almost odorless, it's colorless! It only truly betrays its presence by the explosion!"

“Mr. James,” replied Simon Ford, “will you allow me to tell you what I did… and how I did it… in my own way, with apologies for the length?”

James Starr knew the old overman, and knew that the best thing to do was to let him go.

“Mr. James,” Simon Ford continued, “for ten years, not a day has gone by without Harry and me thinking about restoring the coal mine to its former glory—no, not a single day! If some deposit still existed, we were determined to find it. What methods should we use? Drilling? That wasn't possible for us, but we had a miner's instinct, and often one

goes straight to the point by instinct than by reason.” “At least, that's my idea…”

"Which I do not contradict," replied the engineer.

"Now, here's what Harry had observed once or twice during his excursions in the western part of the coalfield. Fires, which would suddenly go out, sometimes appeared through the shale or the backfill of the outermost galleries. What caused these fires? I couldn't and still can't say. But in short, these fires were clearly due to the presence of firedamp, and, for me, firedamp was the coal seam."

"These fires produced no explosions?" the engineer asked sharply.

— Yes, small partial explosions, replied Simon Ford, and such as I myself caused when I wanted to ascertain the presence of this firedamp, do you remember how in the old days people tried to prevent explosions in mines, before our good genius, Humphry Davy, invented his safety lamp?

"Yes," replied James Starr. "You mean the 'penitent'? But I've never seen him in the performance of his duties."

“Indeed, Mr. James, you are too young, despite your fifty-five years, to have seen that. But I, ten years older than you, saw the last penitent of the coal mine at work. He was called that because he wore a long monk's robe. His real name was the 'fireman,' the man of fire. In those days, the only way to destroy the noxious gas was by breaking it up with small explosions, before its lightness caused it to accumulate in excessive quantities high in the galleries. That is why the penitent, his face masked, his head hooded in his thick cowl, his whole body tightly encased in his coarse robe, crawled along the ground. He breathed in the lower levels, where the air was pure, and with his right hand, he carried a burning torch, holding it above his head.” When firedamp was dispersed in the air to form a detonating mixture, the explosion occurred without being fatal, and by frequently repeating this operation, disasters were prevented. Sometimes, the penitent, struck by a firedamp explosion, died at the scene. Another replaced him. This continued until Davy's lamp was adopted in all coal mines. But I knew the method, and it was by using it that I recognized the presence of firedamp, and consequently, that of a new carboniferous deposit in the Dochart pit.

Everything the old foreman had said about the penitent was absolutely true. That was how they used to do it in coal mines to purify the air in the galleries.

Firedamp, also known as hydrogen procarbonate or marsh gas, is colorless, almost odorless, and provides little light, making it completely unfit for respiration. A miner could not live in an environment filled with this harmful gas—any more than one could live in a gasometer filled with illuminating gas. Furthermore, like illuminating gas, which is hydrogen procarbonate, firedamp forms a volatile mixture as soon as air enters it in a proportion of eight percent, and perhaps even five percent. If this mixture ignites for any reason, an explosion occurs, almost always followed by horrific catastrophes.

It is this danger that Davy's device addresses, by isolating the lamp flame in a wire-mesh tube, which burns the gas inside the tube, never allowing the flame to spread outside. This safety lamp has been improved in twenty ways. If it breaks, it goes out. If, despite explicit warnings, the miner tries to open it, it goes out again. Why then do explosions occur? Because nothing can prevent the carelessness of a worker who still wants to light his pipe, nor the impact of a tool that can produce a spark.

Not all coal mines are affected by firedamp. In those where it doesn't occur, the use of an ordinary lamp is permitted. This is the case, among others, at the Thiers pit in the Anzin mines. However, when the coal in the coal seam being mined is oily, it contains a certain amount of volatile matter, and firedamp can escape in great abundance. Only the safety lamp is designed to prevent explosions that are all the more terrible because miners who are not directly affected by the firedamp explosion risk being instantly asphyxiated in the galleries filled with the noxious gas formed after ignition, namely carbonic acid.

As they walked, Simon Ford told the engineer what he had done to achieve his goal, how he had ensured that the release of the firedamp was taking place at the very bottom of the extreme gallery of the pit, in its western portion, how he had caused at the outcrop of the shale sheets some partial explosions, or rather some ignitions, which left no doubt as to the nature of the gas, the leak of which was taking place in small doses, but in a permanent manner.

An hour after leaving the cottage, James Starr and his two companions had covered a distance of four miles. The engineer, driven by desire and hope, had just completed this journey without giving it a second thought. He pondered everything the old miner told him. He mentally weighed the arguments the latter presented in favor of his theory. He believed, along with him, that this continuous emission of protocarbonate hydrogen indicated, with certainty, the existence of a new carboniferous deposit. If it had been merely a kind of pocket, filled

with gas, such as is sometimes found between the layers of ore, it would have quickly emptied, and the phenomenon would have ceased to occur. But far from it. According to Simon Ford, the hydrogen was being released continuously, and one could conclude from this the existence of some significant vein. Consequently, the riches of the Dochart pit might not be entirely exhausted. However, was it a layer with a low yield, or a deposit occupying a large part of the coalfield? That was, truly, the big question.

Harry, who was ahead of his father and the engineer, had stopped.

"Here we are!" cried the old miner. "Finally, thank God, Mr. James, you're here, and we're going to find out..."

The old overman's usually firm voice trembled slightly.

"My good Simon," the engineer told him, "calm down! I am as moved as you are, but we mustn't waste any time!"

At this point, the outermost gallery of the pit, as it widened, formed a kind of dark cavern. No shaft had been sunk into this part of the massif, and the gallery, deeply opened into the bowels of the earth, had no direct communication with the surface of Stirling County.

James Starr, keenly interested, examined his surroundings with a serious eye.

The marks of the last pickaxe blows, and even a few cartridge holes, which had caused the rock to split open towards the end of mining operations, were still visible on the terminal wall of this cavern. This schistous material was extremely hard, and it had not been necessary to backfill the foundations of this dead end, at the bottom of which work had had to stop. There, in fact, the Carboniferous vein ended, between the schists and sandstones of the Tertiary strata. There, in that very spot, the last piece of fuel from the Dochart pit had been extracted.

"It is here, Mr. James," said Simon Ford, raising his pickaxe, "it is here that we will attack the fault, for behind this wall, at a more or less considerable depth, lies the new vein whose existence I affirm."

"And it was on the surface of these rocks," asked James Starr, "that you observed the presence of firedamp?"

"Right there, Mr. James," replied Simon Ford, "and I was able to light it just by bringing my lamp close to the edge of the pages. Harry did the same as me."

"At what height?" asked James Starr.

"Ten feet above the ground," replied Harry.

James Starr had sat down on a rock. It seemed that, after having sniffed the air of the cavern, he was looking at the two miners, as if he had begun to doubt their words, however affirmative they were.

Indeed, protocarbon hydrogen is not completely odorless, and the engineer was initially surprised that his very keen sense of smell hadn't detected the presence of the explosive gas. In any case, if the gas was mixed with the surrounding air, it was only in very small quantities. Therefore, there was no explosion to fear, and it was safe to open the safety lamp to try the experiment, just as the old miner had already done.

What worried James Starr at the moment was not that there was too much gas mixed with the air, but that there wasn't enough — or even any at all.

“Could they have been mistaken?” he murmured. “No! They’re men who know what they’re doing! And yet!...” He waited, therefore, not without some anxiety, for the phenomenon reported by Simon Ford to occur in his presence. But, at that moment, it seemed that what he had just observed—that is, the absence of the characteristic smell of firedamp—had also been noticed by Harry, for the latter, in a broken voice, said:

"Father, it seems that the gas leak is no longer passing through the shale sheets!"

"It's not done anymore!" cried the old miner.

And Simon Ford, after tightly sealing his lips, inhaled strongly through his nose, several times.

Then, all of a sudden, and with a sudden movement:

"Give me your lamp, Harry!" he said.

Simon Ford took the lamp with a feverishly flailing hand. He unscrewed the wire mesh covering the wick, and the flame burned in the open air.

As expected, there was no explosion; but, more seriously, there was not even that slight crackling sound which indicates the presence of firedamp in small doses.

Simon Ford took the stick that Harry was holding, and, fixing the lamp to its end, he raised it into the upper layers of air, where the gas, because of its specific lightness, should rather have accumulated, however small a quantity it might be.

The lamp's flame, straight and white, detected no trace of protocarbon hydrogen.

"To the wall!" said the engineer.

"Yes!" replied Simon Ford, shining the lamp on that part of the wall through which he and his son had, just the day before, noticed the gas leak.

The old miner's arm trembled as he tried to move the lamp to the level of the cracks in the shale layer.

"Replace me, Harry," he said.

Harry took the stick and successively presented the lamp to the various points on the wall where the sheets seemed to split in two... but he shook his head, because that slight crackling sound, peculiar to escaping firedamp, did not reach his ear.

No ignition occurred. It was therefore evident that no gas molecules were escaping through the wall.

"Nothing!" cried Simon Ford, whose fist clenched with an impression of anger rather than disappointment.

A scream then escaped from Harry's mouth.

"What's wrong?" James Starr asked sharply.

— We've filled the cracks in the shale!

"Are you telling the truth?" exclaimed the old miner.

"Look, Father!"

Harry had been right. The cracks had been filled, clearly visible in the lamplight. A recent lime mortar sealant left a long, whitish mark on the wall, poorly concealed under a layer of coal dust.

"Him!" cried Hardy. "It can only be him!"

"Him!" repeated James Starr.

“Yes!” replied the young man, “that mysterious being who haunts our estate, the one I’ve watched for a hundred times without ever being able to catch him, the author, now certain, of that letter that tried to prevent you from coming to the meeting my father, Mr. Starr, had arranged for you, the one, finally, who threw that stone down the Yarow shaft gallery! Ah! There can be no more doubt! A man’s hand is behind all this!”

Harry had spoken with such energy that his conviction instantly and completely took hold in the engineer's mind. As for the old overman, he no longer needed convincing. Besides, they were faced with an undeniable fact: the cracks through which the gas had been escaping freely the day before had been sealed.

"Take your pickaxe, Harry," cried Simon Ford. "Get on my shoulders, lad! I'm still strong enough to carry you!"

Harry understood. His father leaned against the wall. Harry climbed onto his shoulders so that his pick could reach the clearly visible mark of the grouting. Then, with repeated blows, he began to chip away at the section of shale rock that the grouting covered.

A slight fizzing sound occurred at once, similar to that made by Champagne wine when it escapes from a bottle—a sound which, in English coal mines, is known by the onomatopoeic name of "puff".

Harry then grabbed his lamp and held it close to the crack...

A slight detonation was heard, and a small red flame, slightly bluish at its edge, fluttered on the wall, like a will-o'-the-wisp of St. Elmo's fire.

Harry immediately jumped to the ground, and the old overman, unable to contain his joy, seized the engineer's hands, exclaiming:

"Hurrah! Hurrah! Hurrah! Mr. James! The firedamp is burning! So, the vein is there!"

VIII

A blast of dynamite

The experiment announced by the old overman had succeeded. Protocarbon hydrogen, as we know, only develops in coal deposits. Therefore, the existence of a vein of this precious fuel could not be

doubted. What was its size and quality? That would be determined later.

These were the conclusions that the engineer deduced from the phenomenon he had just observed. They were entirely consistent with those already drawn by Simon Ford.

“Yes,” James Starr thought, “behind this wall lies a Carboniferous layer that our drilling has failed to reach! This is unfortunate, since all the equipment in the mine, abandoned for ten years, now needs to be rebuilt! Never mind! We have rediscovered the vein that was thought to be exhausted, and this time, we will exploit it to the very end!”

"Well, Mr. James," asked Simon Ford, "what do you think of our discovery? Was it wrong of me to bother you? Do you regret that last visit to the Dochart pit?"

“No, no, my old friend!” replied James Starr. “We haven’t wasted our time, but we would be wasting it now if we didn’t return to the cottage immediately. Tomorrow we’ll come back here. We’ll blast this wall with dynamite. We’ll expose the outcrop of the new vein, and, after a series of soundings, if the seam appears substantial, I’ll re-establish a New Aberfoyle Company, to the utmost satisfaction of the former shareholders! The first skips of coal must be extracted from the new deposit within three months!”

"Well said, Mr. James!" cried Simon Ford. "The old coal mine will be rejuvenated, like a widow remarrying! The bustle of the old days will return with the blows of the pickaxe, the blows of the pick, the blasts of the mine shafts, the rumble of the wagons, the neighing of the horses, the creaking of the buckets, the roar of the engines! I'll see it all again! I hope, Mr. James, you won't find me too old to resume my duties as overman?"

— No, good Simon, no, certainly not! You have stayed younger than me, my old comrade!

— And, may Saint Mungo protect us! You will still be our "viewer"! May the new venture last for many years, and may Heaven grant me the consolation of dying without having seen its end!

The old miner's joy was overflowing. James Starr shared it entirely, but he let Simon Ford's enthusiasm be enough for two.

Alone, Harry remained lost in thought. In his mind, the succession of strange, inexplicable circumstances surrounding the discovery of the

new deposit reappeared. This did not fail to worry him about the future.

An hour later, James Starr and his two companions were back at the cottage.

The engineer ate supper with great appetite, approving with his gesture all the plans that the old overman was developing, and, had it not been for his imperious desire to be there the next day, he would never have slept better than in the absolute calm of the cottage.

The next day, after a substantial lunch, James Starr, Simon Ford, Harry, and Madge herself retraced their steps from the day before. They all went like true miners, carrying various tools and sticks of dynamite intended for blasting the terminal wall. Harry, along with a powerful lantern, took a large safety lamp that could burn for twelve hours. This was more than enough for the round trip, including any stops necessary for exploration—if exploration proved possible.

"Let's get to work!" cried Simon, when he and his companions had reached the end of the gallery.

And her hand grasped a heavy pair of pliers, which she brandished vigorously.

"Just a moment," said James Starr. "Let's observe whether any change has occurred and whether the firedamp is still gushing through the layers of the wall."

“You’re right, Mr. Starr,” replied Harry. “What was blocked yesterday might well be blocked again today!”

Madge, sitting on a rock, carefully observed the excavation and the wall that was to be breached.

It was observed that things were exactly as they had been left. The cracks in the coal seams had undergone no alteration. Protocarbon hydrogen was escaping, but rather weakly. This was undoubtedly because, since the previous day, it had found a free passage to release its gases. However, this emission was so minimal that it could not form a detonating mixture with the ambient air. James Starr and his companions could therefore proceed safely. Moreover, this air would gradually purify itself as it rose into the upper layers of the Dochart pit, and the firedamp, dispersed throughout this atmosphere, would no longer be able to produce any explosions.

"Let's get to work, then!" Simon Ford resumed.

And soon, under her vigorously wielded pincers, the rock quickly shattered.

This fault consisted mainly of conglomerates, interposed between the sandstone and the shale, such as are most often found at the outcrop of Carboniferous veins.

James Starr collected the pieces that the tool felled, and he examined them carefully, hoping to discover some trace of coal.

This initial work lasted approximately one hour. It resulted in a fairly deep hollow in the terminal wall.

James Starr then chose the location where the blast holes were to be drilled, a task quickly completed under Harry's guidance with the foil and sledgehammer. Cartridges of dynamite were inserted into these holes. As soon as the long, tarred fuse of a safety flare, which terminated in a fulminate capsule, was placed inside, it was ignited at ground level. James Starr and his companions moved aside.

"Ah! Mr. James," said Simon Ford, overcome by genuine emotion which he did not seek to conceal, "never, no, never has my old heart beaten so fast! I would like to start mining the vein already!"

"Patience, Simon," replied the engineer, "you don't presume to find a completely open gallery behind this wall?"

“Excuse me, Mr. James,” replied the old overman. “I have every possible claim! If there was good fortune in the way Harry and I discovered this cottage, why shouldn’t that fortune continue to the end?”

The dynamite exploded. A dull rumble spread through the network of underground tunnels.

James Starr, Madge, Harry and Simon Ford immediately returned to the cave wall.

"Mr. James! Mr. James!" cried the old overman. "Look! The door is broken down!"

Simon Ford's comparison was justified by the appearance of an excavation, the depth of which could not be estimated.

Harry was about to dash through the opening...

The engineer, extremely surprised to find this cavity there, detained the young miner.

"Give the indoor air time to purify itself," he said.

"Yes! Beware of the mofettes!" cried Simon Ford.

A quarter of an hour passed in anxious waiting. The lantern, placed at the end of a stick, was then introduced into the excavation and continued to burn with an unalterable brilliance.

"Go on, Harry," said James Starr, "we'll follow you." The opening made by the dynamite was more than large enough for a man to pass through.

Harry, lantern in hand, entered without hesitation and disappeared into the darkness.

James Starr, Simon Ford and Madge stood motionless, waiting.

A minute—which seemed very long to them—passed. Harry didn't reappear, he didn't call out. As James Starr approached the opening, he no longer even saw the glow of his lamp, which should have illuminated the dark cavity.

Had the ground suddenly given way beneath Harry's feet? Had the young miner fallen into some crevice? Could his voice no longer reach his companions?

The old overman, refusing to listen, was about to enter himself through the opening when a glimmer appeared, vague at first, which gradually intensified, and Harry uttered these words:

"Come, Mr. Starr! Come, Father! The road is clear in New Aberfoyle."

IX

New Aberfoyle

If, by some superhuman power, engineers could have removed in one piece and to a thickness of one thousand feet all that portion of the earth's crust which supports this collection of lakes, rivers, gulfs and the riparian territories of Stirling, Dumbarton and Renfrew counties, they would have found, under this enormous lid, an immense

excavation, and such as there was only one other in the world that could be compared to it, — the famous Mammoth Cave, in Kentucky.

This excavation consisted of several hundred cells of all shapes and sizes. It resembled a beehive, with its many levels of capriciously arranged cells, but a beehive built on a vast scale, and which, instead of bees, would have been sufficient to house all the ichthyosaurs, megatheriums, and pterodactyls of the geological era!

A labyrinth of galleries, some higher than the highest vaults of cathedrals, others like narrow and winding side aisles, some following the horizontal line, others going up or down obliquely in all directions, — joined these cavities and left free communication between them.

The pillars supporting these vaults, whose curves accommodated all styles, the thick walls, solidly built between the galleries, and the naves themselves, in this layer of secondary strata, were made of sandstone and schist. But between these unusable layers, and powerfully pressed against them, ran remarkable veins of coal, as if the black lifeblood of this strange coalfield had circulated through their intricate network. These deposits extended over a distance of forty miles from north to south, and even penetrated beneath the North Channel. The importance of this basin could only have been assessed after drilling, but it must have surpassed that of the Carboniferous seams of Cardiff, in Wales, and the deposits of Newcastle, in Northumberland.

It should be added that the exploitation of this coal mine was going to be singularly facilitated, since, by a bizarre arrangement of secondary terrains, by an inexplicable withdrawal of mineral materials at the geological time when this massif was solidifying, nature had already multiplied the galleries and tunnels of the New Aberfoyle.

Yes, nature alone! One might have initially thought it the discovery of some mine abandoned for centuries. But that wasn't the case. Such riches are not left untouched. Human termites had never gnawed at this portion of Scotland's subsoil, and it was nature that had done things this way. But, we repeat, no hypogeum of the Egyptian era, no catacomb of the Roman era, could compare to it—except perhaps the famous Mammoth Caves, which, over a length of more than twenty miles, contain two hundred and twenty-six passages, eleven lakes, seven rivers, eight waterfalls, thirty-two bottomless shafts, and fifty-seven domes, some of which are suspended more than four hundred and fifty feet above the ground.

Like these caves, New Aberfoyle was not the work of men, but the work of the Creator.

Such was this new domain, of incomparable richness, whose discovery belonged entirely to the old overman. Ten years spent in the old coal mine, a rare persistence in his search, absolute faith, sustained by a marvelous miner's instinct—he needed all these conditions combined to succeed where so many others would have failed. Why had the soundings, carried out under the direction of James Starr during the last years of operation, stopped precisely at this boundary, on the very edge of the new mine? It was due to chance, which plays a large part in searches of this kind.

In any case, there was, in the Scottish subsoil, a kind of underground county, which lacked, to be habitable, only the rays of the sun, or, failing that, the light of a special star.

The water was concentrated in certain depressions, forming vast ponds, or even lakes larger than Lake Katrine, which lay directly above. These lakes, however, lacked the movement of water, the currents, the surf. They did not reflect the silhouette of any old Gothic castle. Neither birch nor oak leaned over their banks, mountains did not cast long shadows across their surface, steamboats did not ply their waters, no light reverberated in their surface, the sun did not bathe them in its brilliant rays, and the moon never rose on their horizon. And yet, these deep lakes, whose mirror was unrippled by the breeze, would not have been without charm in the light of some electric star, and, linked by a network of canals, they completed the geography of this strange realm quite well.

Although unsuitable for any plant production, this subsoil could nevertheless have served as a home for an entire population. And who knows if, in these environments with constant temperatures, at the bottom of these coal mines of Aberfoyle, as well as in those of Newcastle, Alloa or Cardiff, when their deposits are exhausted, — who knows if the poor of the United Kingdom will not one day find refuge?

X

Back and forth

At Harry's voice, James Starr, Madge and Simon Ford had entered through the narrow opening that connected the Dochart pit with the new coal mine.

They found themselves at the entrance to a fairly wide gallery. One might have thought it had been man-made, that pick and shovel had hollowed it out for the exploitation of a new deposit. The explorers must have wondered if, by some strange twist of fate, they had stumbled into some old coal mine, the existence of which even the oldest miners in the county had never known.

No! It was the geological strata that had "spared" this gallery during the subsidence of the secondary layers. Perhaps some torrent had once flowed through it, when the upper waters mingled with the embedded vegetation; but now it was as dry as if it had been bored some thousand feet lower, into the granitoid rocks. At the same time, air circulated freely within it—which indicated that certain natural vents connected it to the outside atmosphere.

This observation, made by the engineer, was correct, and it was clear that ventilation was working easily in the new mine. As for the firedamp that had once gushed through the shale of the wall, it seemed to have been contained in a single, now empty, pocket, and it was certain that the atmosphere of the gallery retained not the slightest trace of it. However, as a precaution, Harry had only taken his safety lamp, which provided him with twelve hours of light.

James Starr and his companions were filled with joy. It was the complete fulfillment of their desires. All around them, there was nothing but coal. A certain emotion made them silent. Simon Ford himself was holding back. His joy overflowed, not in long sentences, but in short interjections.

It was perhaps unwise of them to venture so deep into the crypt. But they hardly gave a thought to returning. The passage was passable, not very winding. No crevice blocked the way, no creeping growth emanated noxious fumes. There was therefore no reason to stop, and for an hour, James Starr, Madge, Harry, and Simon Ford continued on, without anything indicating the exact direction of this unknown tunnel.

And, no doubt, they would have gone even further, if they had not reached the very end of this wide road which they had been following since their entry into the coal mine.

The gallery led to an enormous cavern, whose height and depth could not be estimated. At what altitude did the vault of this excavation curve, and how far back did its opposite wall recede? The darkness that filled it prevented any identification. But, by lamplight, the explorers were able to see that its dome covered a vast expanse of still water—a pond or a lake—whose picturesque banks, rugged with high rocks, were lost in the darkness.

"Halt!" cried Simon Ford, stopping abruptly. "One more step, and we might be rolling into some abyss!"

"Let us rest then, my friends," replied the engineer. "Besides, we must think about returning to the cottage."

"Our lamp can light our way for another ten hours, Mr. Starr," said Harry.

"Well, let's stop," James Starr continued. "I admit my legs need it!" "And you, Madge, don't you feel tired from such a long run?"

"But not too much, Mr. James," replied the sturdy Scottish woman. "We used to spend entire days exploring the old Aberfoyle coal mine."

"Bah!" added Simon Ford, "Madge would drive that route ten times over if she had to! But I insist, Mr. James, was my communication worth making to you? Dare to say no, Mr. James, dare to say no!"

"Ah! my old friend, it's been a long time since I've felt such joy!" replied the engineer. "The little we've explored of this marvelous coal mine seems to indicate that its extent is very considerable, at least in length."

"In width and depth too, Mr. James!" replied Simon Ford.

— That's what we'll find out later.

— And I'll take responsibility for that! Trust my old miner's instinct. It's never failed me!

"I want to believe you, Simon," replied the engineer, smiling. "But, as far as I can tell from this brief exploration, we have the elements for an operation that will last for centuries!"

"Centuries!" cried Simon Ford. "I can well believe it, Mr. James! A thousand years and more will pass before the last lump of coal is extracted from our new mine!"

"God hear you!" replied James Starr. "As for the quality of the coal that comes to the surface of these walls..."

"Superb! Mr. James, superb!" replied Simon Ford. "See for yourself!" And, saying this, he detached a fragment of black rock with a single blow of his pickaxe.

“Look! Look!” he repeated, bringing it close to his lamp. “The surfaces of this lump of coal are gleaming! We’ll have some rich, bituminous coal here! And how it will break down into tiny lumps, almost dust-free! Ah, Mr. James, twenty years ago, this was a deposit that would have given Swansea and Cardiff a run for their money! Well, the stokers will still be fighting over it, and if it costs little to extract from the mine, it won’t sell for any less outside!”

“Indeed,” said Madge, who had taken the piece of coal and was examining it with the discerning eye of a connoisseur. “This is good quality coal.” “Take it away, Simon, take it to the cottage! I want this first piece of coal burning under our kettle!”

— Well said, woman! replied the old overman, and you will see that I was not mistaken.

"Mr. Starr," Harry then asked, "do you have any idea of the likely direction of this long tunnel we have been following since we entered the new coal mine?"

"No, my boy," replied the engineer. "With a compass, I might have been able to determine its general direction. But, without a compass, I am here like a sailor in the open sea, in the middle of the fog, when the absence of sun prevents him from taking his position."

"No doubt, Mr. James," replied Simon Ford, "but please don't compare our position to that of the sailor, who always and everywhere has the abyss beneath his feet! We are on solid ground here, and we have no fear of ever sinking!"

"I won't trouble you, old Simon," replied James Starr. "Far be it from me to disparage the new Aberfoyle coal mine by an unfair comparison! I only meant one thing: we don't know where we are."

"We are in the subsoil of Stirling County, Mr. James," replied Simon Ford, "and I state that as if..."

"Listen!" said Harry, interrupting the old overman.

They all listened intently, as did the young miner. His keen sense of hearing had detected a muffled sound, like a distant murmur. James Starr, Simon, and Madge soon heard it themselves. A kind of rolling sound was occurring in the upper layers of the rock, the successive crescendo and decrescendo of which, however faint, could be clearly perceived.

All four remained for a few minutes, listening intently, without uttering a word.

Then, all of a sudden, Simon Ford exclaimed:

"Hey! By Saint Mungo! Are the mine carts already running on the tracks of the new Aberfoyle?"

"Father," replied Harry, "it seems to me that this is the sound of water rolling on a shoreline."

"But we're not under the sea!" cried the old overman.

"No," replied the engineer, "but it would not be impossible that we were under the very bed of Lake Katrine."

— So the vault would have to be quite thin in that spot, since the sound of the water is audible?

"Not very thick indeed," replied James Starr, "and that is why this excavation is so vast."

"You must be right, Mr. Starr," said Harry.

— Besides, the weather is so bad outside," continued James Starr, "that the waters of the lake must be raised like those of the Gulf of Forth."

"Well, what does it matter, after all," replied Simon Ford. "The Carboniferous layer won't be any worse for developing beneath a lake! It wouldn't be the first time we've looked for coal under the very bed of the ocean! When we have to exploit the entire bottom and depths of the North Canal, what's the harm?"

"Well said, Simon!" cried the engineer, unable to suppress a smile as he looked at the enthusiastic overman. "Let's push our trenches beneath

the sea! Let's dig holes in the Atlantic like a sieve! Let's reach our brothers in the United States, pickaxe to pick, through the ocean floor! Let's race to the center of the globe, if need be, to wrest its last bit of coal from it!"

"Do you think you're joking, Mr. James?" asked Simon Ford, with a slightly mocking air.

"Me, laugh! Old Simon! No! But you're so enthusiastic, you're leading me into the impossible! Look, let's get back to reality, which is already quite lovely. Let's leave our pickaxes behind, which we'll find another day, and head back to the cottage!"

There was nothing else to do at the moment. Later, the engineer, accompanied by a team of miners and equipped with the necessary lamps and tools, would resume the exploration of the New Aberfoyle mine. But it was urgent to return to the Dochart pit. The route was easy, moreover. The tunnel ran almost straight through the rock face to the opening created by the dynamite. So, there was no fear of getting lost.

But, just as James Starr was heading towards the gallery, Simon Ford stopped him.

“Mr. James,” he said, “do you see this immense cavern, this underground lake it covers, this shore that the waters come to bathe at our feet? Well, it is here that I want to move my home, it is here that I will build myself a new cottage, and, if a few brave companions will follow my example, within a year there will be one more town in the heart of our old England!”

James Starr, approving Simon Ford's plans with a smile, shook his hand, and the three of them, preceding Madge, went down into the gallery to return to the Dochart pit.

For the first mile, no incident occurred. Harry walked ahead, holding the lamp above his head. He carefully followed the main gallery, never straying into the narrow tunnels that radiated off to the right and left. It seemed, therefore, that the return journey would be as easy as the outward one, when a troublesome complication arose, which made the explorers' situation very serious.

Indeed, at the moment Harry raised his lamp, a sudden movement of air occurred, as if caused by the beating of invisible wings. The lamp, struck at an angle, slipped from Harry's hands, fell onto the rocky floor of the gallery, and shattered.

James Starr and his companions were suddenly plunged into absolute darkness. Their lamp, from which the oil had spilled, could no longer be used.

"Well, Harry," cried Simon Ford, "do you want us to break our necks walking back to the cottage?"

Harry didn't answer. He was thinking. Was he to see the hand of some mysterious being in this latest accident? Did an enemy exist in these depths whose inexplicable antagonism could one day create serious difficulties? Did someone have an interest in defending the new Carboniferous deposit against any attempt at exploitation? In truth, it was absurd, but the facts spoke for themselves, and they accumulated in such a way as to transform mere presumptions into certainties.

Meanwhile, the explorers' situation was quite bad. They had to follow the tunnel leading to the Dochart pit for about five miles in the pitch-black darkness. Then they would have another hour's drive before reaching the cottage.

“Let’s continue,” said Simon Ford. “We haven’t a moment to lose. We’ll proceed by feel, like blind men. It’s impossible to get lost. The tunnels that open up in our path are nothing but veritable molehills, and by following the main gallery, we’ll inevitably come back to the opening that gave us passage. Then there’s the old coal mine. We know it well, and it won’t be the first time Harry or I have found ourselves there in the dark. Besides, we’ll find the lamps we left behind. Onward we go, then! — Harry, take the lead. Mr. James, follow him. Madge, you come after, and I’ll bring up the rear. Above all, let’s not separate, and let’s keep our heels, if not our elbows, close together!”

All they had to do was follow the old foreman's instructions. As he said, by feeling their way, they could hardly go wrong. They simply had to replace their eyes with their hands, and trust that instinct which, for Simon Ford and his son, had become second nature.

So, James Starr and his companions marched in the order indicated. They didn't speak, but it wasn't for lack of thinking. It was becoming clear that they had an adversary. But who was it, and how could they defend themselves against these mysteriously planned attacks? These rather unsettling thoughts flooded their minds. However, this was no time to be discouraged.

Harry, with arms outstretched, advanced with a sure step. He went successively from one wall to the other of the gallery. If a crevice or a lateral opening appeared, he would recognize with his hand that he

should not enter it, either because the crevice was shallow or because the opening was too narrow, and he thus kept himself on the right path.

In the midst of a darkness to which the eyes could not adjust, since it was absolute, this difficult return lasted approximately two hours. Calculating the time elapsed, taking into account that the march could not have been rapid, James Starr estimated that he and his companions must be very close to the end.

Indeed, almost immediately, Harry stopped.

"Have we finally reached the end of the gallery?" asked Simon Ford.

— Yes, replied the young miner.

— Well, you have to find the opening that establishes communication between New Aberfoyle and the Dochart pit?

"No," replied Harry, whose clenched hands only met the solid surface of a wall.

The old overman took a few steps forward, and came to feel the shale rock himself.

A cry escaped him.

Either the explorers had gotten lost on the return journey, or the narrow opening, blasted into the wall with dynamite, had been recently plugged!

In any case, James Starr and his companions were imprisoned in New Aberfoyle!

XI

The Ladies of Fire

Eight days after these events, James Starr's friends were deeply worried. The engineer had disappeared without any apparent reason. Questioning his servant revealed that he had embarked at Grantonpier, and the captain of the steamboat *Prince of Wales confirmed* that he had disembarked at Stirling. But since then, there had been no further trace of James Starr. Simon Ford's letter had urged secrecy, and he had said nothing about his departure for the Aberfoyle coal mines.

So, in Edinburgh, the only topic of conversation was the engineer's inexplicable absence. Sir W. Elphiston, the president of the Royal Institution, shared with his colleagues the letter James Starr had sent him, apologizing for being unable to attend the Society's next meeting. Two or three other people also produced similar letters. But while these documents proved that James Starr had left Edinburgh—which was already known—they offered no indication of his whereabouts. And, coming from such a man, this absence, so out of character, was bound to be surprising at first, and then worrying, since it was prolonged.

None of the engineer's friends could have imagined he had gone to the Aberfoyle coal mines. It was known he would not have liked to see the old scene of his work again. He had never set foot there since the day the last mine cart was brought to the surface. However, since the steamboat had dropped him off at the Stirling wharf, some inquiries were made in that direction.

The search proved fruitless. No one remembered ever seeing the engineer in the area. Only Jack Ryan, who had met him with Harry on one of the landings of the Yarow shaft, could have satisfied public curiosity. But the jolly fellow, as everyone knew, worked at the Melrose farm, forty miles southwest of Renfrew County, and he had little idea that anyone was so worried about James Starr's disappearance. So, eight days after his visit to the cottage, Jack Ryan would have continued to sing even more joyfully during the evening gatherings of the Irvine clan—had he not also had cause for deep concern, which will soon be explained.

James Starr was too important and respected a man, not only in the city but throughout Scotland, for anything concerning him to go unnoticed. The Lord Provost, Edinburgh's chief magistrate, the bailiffs, and the councilors, most of whom were friends of the engineer, launched a thorough investigation. Agents were deployed, but to no avail.

It was therefore necessary to place a notice in the main newspapers of the United Kingdom concerning the engineer James Starr, giving his description, indicating the date on which he had left Edinburgh, and then all that remained was to wait. This was not done without great anxiety. The scholarly world of England was not far from believing in the permanent disappearance of one of its most distinguished members.

While there was such concern about James Starr, there was equally great concern about Harry. However, instead of capturing public

attention, the old overman's son only disturbed the good humor of his friend Jack Ryan.

We recall that, during their meeting at Yarow Well, Jack Ryan invited Harry to come to the Irvine clan's feast eight days later. Harry accepted and made a formal promise to attend. Jack Ryan knew, from having witnessed it on numerous occasions, that his friend was a man of his word. With him, a promise was a promise.

But at Irvine's party, nothing was missing, neither songs, nor dances, nor festivities of all kinds, nothing — except Harry Ford.

Jack Ryan had initially resented him, because his friend's absence affected his good mood. He even lost his memory in the middle of one of his songs, and, for the first time, he ran out of time during a jig, which usually earned him well-deserved applause.

It must be said that the note concerning James Starr, published in the newspapers, had not yet reached Jack Ryan. This good fellow was therefore only concerned with Harry's absence, convinced that only a serious circumstance could have prevented him from keeping his promise. Thus, the day after the Irvine celebration, Jack Ryan intended to take the Glasgow railway to Dochart Pit, and he would have done so —had he not been detained by an accident that nearly cost him his life.

This is what happened during the night of December 12th. In truth, the event was such as to vindicate all the believers in the supernatural, and there were many of them at the Melrose farm.

Irvine, a small seaside town in County Renfrew with about seven thousand inhabitants, is built on a sharp bend in the Scottish coast, almost at the mouth of the Gulf of Clyde. Its harbor, fairly well sheltered from the open sea winds, is lit by a prominent light that marks the landing points, so that a prudent sailor cannot be mistaken. Consequently, shipwrecks were rare on this stretch of coastline, and coastal vessels or long-distance ships, whether they wished to enter the Gulf of Clyde for Glasgow or to enter Irvine Bay, could maneuver safely, even on dark nights.

When a city has a historical past, however slight, when its castle once belonged to a Robert Stuart, it is not without possessing some ruins.

Now, in Scotland, all ruins are haunted by spirits. — At least, that is the common opinion in the Highlands and Lowlands.

The oldest, and also the most infamous, ruins in this part of the coast were precisely those of this castle of Robert Stuart, which bears the name of Dundonald-Castle.

At that time, Dundonald Castle, refuge for all the wandering goblins of the region, was left to complete abandonment. Few people visited it on the high rock it occupied above the sea, two miles from the town. Perhaps a few foreigners still entertained the idea of questioning these ancient historical remains, but they went there alone. The inhabitants of Irvine would not have taken them there, no matter the cost. Indeed, some stories circulated about certain "Ladies of Fire" who haunted the old castle.

The most superstitious claimed to have seen these fantastic creatures with their own eyes. Naturally, Jack Ryan was among them.

The truth is that, from time to time, long flames appeared, sometimes on a section of half-collapsed wall, sometimes at the top of the tower that overlooks all the ruins of Dundonald-Castle.

Did these flames have a human form, as was claimed? Did they deserve the name "Ladies of Fire" given to them by the Scots of the coast? This was obviously just an illusion of credulous minds, and science would have physically explained this phenomenon.

In any case, the Ladies of Fire had a well-established reputation throughout the region for frequenting the ruins of the old castle and sometimes performing strange sarabands there, especially on dark nights. Jack Ryan, however daring a companion he might be, would not have dared to join them to the sounds of his bagpipes.

"Old Nick is enough for them!" he said, "and he doesn't need me to complete his infernal orchestra!"

As one might expect, these bizarre apparitions formed the obligatory text for stories told during the evening gatherings. Thus, Jack Ryan possessed a whole repertoire of legends about the Ladies of Fire, and was never at a loss when it came to telling them!

So, during this last vigil, well-lubricated with ale, brandy and whiskey, which had ended the party of the Irvine clan, Jack Ryan did not fail to resume his favorite theme, to the great pleasure and perhaps to the great terror of his listeners.

The vigil was held in a large barn on the Melrose farm, on the edge of the coastline. A good coke fire burned in a wide metal tripod, in the

middle of the gathering.

There was rough weather outside. Thick mists rolled over the waves, which a strong southwesterly breeze brought in from the open sea. A very dark night, not a single break in the clouds, the land, sky and water merging in deep darkness, it was enough to make landings in Irvine Bay difficult, if any ship had ventured there with these winds beating along the coast.

The small port of Irvine is not very busy—at least not with ships of any significant tonnage. It is a little further north that merchant vessels, sailing or steam-powered, approach the shore when they wish to enter the Gulf of Clyde. That evening, however, some fisherman, lingering on the shore, would have seen, not without surprise, a ship heading towards the coast. If day had suddenly broken, it would no longer have been with surprise, but with terror, that this vessel would have been seen, running downwind with all the sail it could carry. Having missed the entrance to the gulf, there was no refuge among the formidable rocks of the coastline. If this imprudent ship persisted in approaching them further, how would it manage to right itself?

The evening was to end with a final Jack Ryan story. His listeners, transported into the world of ghosts, were in the right frame of mind to act credulously, if necessary.

Suddenly, shouts rang out from outside.

Jack Ryan immediately stopped his story, and everyone hurriedly left the barn.

The night was deep. Long gusts of rain and wind raced across the surface of the shore.

Two or three fishermen, braced near a rock to better resist the air currents, were calling out with loud bursts of voices.

Jack Ryan and his companions ran towards them.

These cries were not directed at the inhabitants of the farm, but at a crew who, unknowingly, were rushing towards their doom.

Indeed, a dark mass appeared indistinctly a few cables offshore. It was a ship, easily recognizable by its navigation lights: a white light on its foremast top, a green light on the starboard side, and a red light on the port side. It could therefore be seen from the bow, and it was clear that it was heading at full speed towards the coast.

"A ship in distress?" exclaimed Jack Ryan.

"Yes," replied one of the fishermen, "and now if he wanted to change course, he wouldn't be able to!"

"Signals, signals!" shouted one of the Scotsmen.

"Which ones?" replied the fisherman. "In this gale, you couldn't even keep a torch lit!"

And, while these words were being rapidly exchanged, new cries were raised. But how could they have been heard in the midst of this storm? The ship's crew no longer had any chance of escaping the shipwreck.

"Why maneuver like that?" exclaimed a sailor.

"Does he want to make a run for it?" replied another.

"So the captain wasn't aware of Irvine's fire?" asked Jack Ryan.

"We must believe him," replied one of the fishermen, "unless he has been deceived by someone..."

The fisherman hadn't finished his sentence when Jack Ryan let out a tremendous cry. Did the crew hear him? In any case, it was too late for the ship to recover from the line of breakers that whitened in the darkness.

But this was not, as one might have thought, a final warning that Jack Ryan had tried to send to the sinking vessel. Jack Ryan had his back to the sea. His companions, too, were looking at a point half a mile back from the shore.

It was Dundonald's castle. A long flame twisted in the gusts at the top of the old tower.

"The Lady of Fire!" cried all those superstitious Scots in great terror.

Frankly, it took a good deal of imagination to find a human appearance in this flame. Agitated like a luminous pavilion in the breeze, it sometimes seemed to fly from the top of the tower, as if it were about to go out, and, a moment later, it would reattach itself to it by its bluish tip.

"The Lady of Fire! The Lady of Fire!" cried the terrified fishermen and peasants.

Everything became clear then. It was obvious that the ship, disoriented in the fog, had gone astray and had mistaken the flame atop Dundonald Castle for Irvine's fire. It believed itself to be at the entrance to the gulf, ten miles further north, and was racing towards open land that offered it no refuge!

What could be done to save it, if there was still time? Perhaps it would have been necessary to climb up to the ruins and try to extinguish the fire, so that it would no longer be possible to mistake it for the Irvine harbor lighthouse!

No doubt, this was the right thing to do, without delay; but which of these Scotsmen would have had the thought, and, after the thought, the audacity to defy the Lady of Fire? Jack Ryan, perhaps, for he was courageous, and his credulity, however strong it may have been, could not stop him in a generous movement.

It was too late. A horrible cracking sound rang out amidst the crashing elements.

The ship had just run aground stern-first. Its navigation lights went out. The whitish line of the surf seemed to break for a moment. It was the vessel hitting it, listing onto its side, and breaking apart between the reefs.

And, at that very moment, by a coincidence that could only be attributed to chance, the long flame vanished, as if torn away by a violent gust of wind. The sea, the sky, the shore were instantly plunged back into the deepest darkness.

"The Lady of Fire!" Jack Ryan had shouted one last time, when this apparition, supernatural to him and his companions, had suddenly vanished.

But then, the courage these superstitious Scots would have lacked against a imaginary danger, they found again in the face of a real one, now that it was a matter of saving their fellow men. The raging elements did not stop them. Using ropes thrown into the waves—as heroic as they had been credulous—they rushed to the aid of the wrecked vessel.

Fortunately, they succeeded, not without some — and the daring Jack Ryan was among them — having been seriously injured on the rocks; but the captain of the ship and the eight men of the crew were able to be put down, safe and sound, on the shore.

This ship was the Norwegian brig *Motala* , loaded with timber from the north, bound for Glasgow.

It was all too true. The captain, deceived by this fire, lit on the tower of Dundonald's castle, had come to strike the coast, instead of entering the Gulf of Clyde.

And now, of *Motala* , only a few wrecks remained, whose debris was being further broken by the surf on the coastal rocks.

XII

The Exploits of Jack Ryan

Jack Ryan and three of his companions, wounded like him, had been transported to one of the rooms of the Melrose farm, where they were immediately given care.

Jack Ryan had suffered the most, for when, with a rope around his waist, he threw himself into the sea, the furious waves had roughly tossed him onto the reefs. His companions had almost brought him back to shore lifeless.

The good fellow was thus confined to his bed for a few days—which greatly angered him. However, when he was allowed to sing as much as he liked, he bore his suffering patiently, and Melrose Farm resounded at all hours with the joyful bursts of his voice. But Jack Ryan, in this adventure, only gained a greater sense of fear of those brawnies and other goblins who amuse themselves by tormenting the poor, and it was they whom he held responsible for the Motala disaster . It would have been foolish to argue with him that the Fire Ladies did not exist, and that this flame, so suddenly hurled among the ruins, was due only to a physical phenomenon. No reasoning would have convinced him. His companions were even more obstinate than he in their credulity. According to them, one of the Fire Ladies had maliciously lured the *Motala* to the shore. As for punishing her for it, that would be like fining the hurricane! The magistrates could order any prosecution they deemed appropriate. One cannot imprison a flame, nor chain an intangible being. And, if it must be said, subsequent investigations seemed to vindicate—at least superstitiously—this explanation.

Indeed, the magistrate, tasked with leading an investigation into the loss of the *Motala* , came to question the various witnesses of the

disaster. All agreed that the shipwreck was due to the supernatural apparition of the Lady of Fire in the ruins of Dundonald Castle.

As one might expect, justice could not be satisfied with such reasons. That a purely physical phenomenon had occurred in those ruins was beyond doubt. But was it an accident or malice? That is what the magistrate had to try to establish.

The word "malicious intent" should come as no surprise. One need not delve far into Breton history to find its justification. Many shipwreck plunderers along the Breton coast made a living by luring vessels ashore to divide their spoils. Sometimes a cluster of resinous trees, set ablaze during the night, would guide a ship into channels from which it could not escape. Other times, a torch, tied to a bull's horns and led at the animal's whim, would mislead a crew about the correct route. The result of these maneuvers was inevitably some shipwreck, from which the plunderers would profit. It took the intervention of the law and harsh punishments to eradicate these barbaric customs. But could it not be that, in this instance, a criminal hand might have revived the old traditions of the shipwreck plunderers?

That's what the police thought, regardless of what Jack Ryan and his companions might have thought. When they heard about the investigation, they split into two camps: some simply shrugged; others, more fearful, announced that provoking supernatural beings in this way would certainly lead to further catastrophes.

Nevertheless, the investigation was conducted with great care. The police officers went to Dundonald Castle and carried out the most rigorous searches.

The magistrate first wanted to determine if the ground bore any footprints that could be attributed to feet other than those of elves. It proved impossible to find the slightest trace, old or new. However, the earth, still damp from the previous day's rain, would have preserved the smallest trace.

"Brawny footprints!" cried Jack Ryan when he learned of the failure of the initial search. "It's like trying to find the tracks of a will-o'-the-wisp in the water of a swamp!"

This first part of the investigation therefore produced no results. It was unlikely that the second part would yield any more.

The aim was to establish, in effect, how the fire could have been lit at the top of the old tower, what elements had been supplied to the

combustion, and finally what residues this combustion had left.

On the first point, nothing, neither match remnants nor scraps of paper, could have been used to light any kind of fire.

On the second point, nothing was found. Neither dried grass nor fragments of wood were found, with which this intense fire must have been largely fueled during the night.

As for the third point, it could not be clarified further. The absence of any ashes, any residue of any kind of fuel, made it impossible even to find the spot where the fire must have been located. There was no blackened area, neither on the earth nor on the rock. Was it then necessary to conclude that the fire had been tended by some wrongdoer? This was highly improbable, since, according to witnesses, the flame was of such a gigantic size that the crew of the *Motala* had been able, despite the fog, to see it from several miles offshore.

"Well!" exclaimed Jack Ryan, "the Lady of Fire knows perfectly well how to do without matches! She blows, that's enough to set the air around her ablaze, and her hearth never leaves any ashes!"

The result of all this was that the magistrates were disappointed, that a new legend was added to so many others, a legend which was to perpetuate the memory of the *Motala catastrophe* and to affirm even more indisputably the appearance of the Ladies of Fire.

However, a fellow as brave as Jack Ryan, and of such robust constitution, could not remain bedridden for long. A few sprains and dislocations were no reason to keep him lying on his side any longer than necessary. He didn't have time to be sick. And when that time is short, one is hardly ever sick in these healthy Lowland regions.

Jack Ryan recovered quickly. As soon as he was back on his feet, before returning to his work at Melrose Farm, he wanted to carry out a certain plan. He intended to visit his friend Harry to find out why he had missed the Irvine clan's party. From a man like Harry, who never made a promise he didn't keep, this absence was inexplicable. It was inconceivable, moreover, that the old overman's son hadn't heard about the *Motala disaster* , which had been reported in great detail in the newspapers. He must have known the part Jack Ryan had played in the rescue, what had become of him, and it would have been too indifferent of Harry not to go to the farm to shake his friend Jack Ryan's hand.

So if Harry hadn't come, it was because he hadn't been able to come.

Jack Ryan would have preferred to deny the existence of the Ladies of Fire rather than believe in Harry's indifference towards him.

So, two days after the disaster, Jack Ryan left the farmhouse, sprightly, like a strong young man who felt no ill effects from his injuries. With a cheerful refrain belted out at the top of his lungs, he echoed off the cliff and made his way to the railway station which, via Glasgow, leads to Stirling and Callander.

There, while he waited in the station, his gaze was first drawn to a poster, reproduced in abundance on the walls, which contained the following notice:

“On December 4th, engineer James Starr, from Edinburgh, embarked at Granton-pier on the *Prince of Wales* . He disembarked the same day at Stirling. Since then, there has been no news of him.”

"Please direct any information concerning him to the President of the Royal Institution, Edinburgh."

Jack Ryan, stopped in front of one of these posters, read it twice, not without showing signs of the most extreme surprise.

"Mr. Starr!" he exclaimed. "But on December 4th, I met him with Harry on the ladders of the Yarow well! That was ten days ago! And he hasn't been seen since! Could that explain why my friend didn't come to Irvine's party?"

And, without taking the time to inform the president of the Royal Institution by letter of what he knew about James Starr, the brave lad jumped on the train, determined to go first to the Yarow shaft. Once there, he would go down to the bottom of the Dochart pit, if necessary, to find Harry, and with him, the engineer James Starr.

Three hours later, he left the train at Callander station and headed quickly towards the Yarow pit.

"They haven't reappeared," he thought. "Why? Is there some obstacle that prevented them? Is it some important job that still keeps them deep in the coal mine? I'll find out!"

And Jack Ryan, lengthening his stride, arrived at the Yarow well in less than an hour.

Externally, nothing has changed. The same silence reigns around the pit. Not a living being in this desert.

Jack Ryan stepped under the ruined lean-to that covered the well's opening. He peered into the abyss... He saw nothing. He listened... He heard nothing.

"And my lamp!" he cried. "Is it no longer where it belongs?"

The lamp, which Jack Ryan used during his visits to the pit, was usually placed in a corner, near the landing of the upper ladder.

That lamp had disappeared.

"That's the first complication!" said Jack Ryan, who was beginning to get very worried.

Then, without hesitation, superstitious as he was:

"I'll go," he said, "when it should be darker in the pit than in the depths of hell!"

And he began to descend the long series of ladders, which led down into the dark well.

Jack Ryan must have retained some of his old mining skills and known the Dochart pit well to venture down it like that. He descended cautiously, his foot feeling each rung, some of which were rotten. Any misstep would have meant a fatal fall into that 1,500-foot void. Jack Ryan counted each landing he left in succession to reach a lower level. He knew his foot wouldn't touch the bottom of the pit until he'd passed the thirtieth. Once there, he figured, he wouldn't have any trouble finding the cottage, built, as everyone knows, at the end of the main gallery.

Jack Ryan thus reached the twenty-sixth level, and, consequently, two hundred feet, at most, separated him from the bottom.

At this point, he lowered his leg to look for the first rung of the twenty-seventh ladder. But his leg, dangling in the air, found no foothold.

Jack Ryan knelt on the landing. He tried to grasp the end of the ladder with his hand... It was in vain.

It was evident that the twenty-seventh ladder was not in its place, and, consequently, that it had been removed.

"Old Nick must have been here!" he said to himself, not without experiencing a certain feeling of dread.

Standing with his arms crossed, still determined to pierce the impenetrable shadow, Jack Ryan waited. Then it occurred to him that if he couldn't descend, the inhabitants of the coal mine certainly hadn't been able to return. Indeed, there was no longer any communication between the county seat and the depths of the pit. If the lower ladders of the Yarow shaft had been removed since his last visit to the cottage, what had become of Simon Ford, his wife, his son, and the engineer? James Starr's prolonged absence clearly proved that he hadn't left the pit since the day Jack Ryan had crossed paths with him in the Yarow shaft. How had the cottage been supplied since then? Hadn't these unfortunate souls, imprisoned fifteen hundred feet underground, run out of provisions?

All these thoughts raced through Jack Ryan's mind. He knew he couldn't reach the cottage on his own. Had there been any malice involved in the communications being cut off? He had no doubt about it. In any case, the magistrates would take action, but they needed to be notified as soon as possible.

Jack Ryan leaned over the landing.

"Harry! Harry!" he shouted in his powerful voice.

The echoes repeatedly passed back and forth the name of Harry, who finally died in the deepest depths of the Yarow shaft.

Jack Ryan quickly climbed the upper ladders and saw daylight again. He didn't waste a moment. In one go, he reached Callander station. He only had to wait a few minutes for the Edinburgh express to pass, and at three o'clock in the afternoon, he presented himself at the Lord Provost's house in the capital.

There, his statement was received. The precise details he provided left no room for doubt regarding its veracity. Sir W. Elphiston, president of the Royal Institution, not only a colleague but also a close friend of James Starr, was immediately informed and asked to direct the search that was to be carried out without delay at the Dochart pit. Several agents were placed at his disposal, equipped with lamps, picks, long rope ladders, and provisions and cordials. Then, led by Jack Ryan, they all immediately set off for the Aberfoyle coalfields.

That same evening, Sir W. Elphiston, Jack Ryan and the agents arrived at the opening of the Yarow shaft, and they descended to the twenty-seventh level, on which Jack had stopped a few hours earlier.

The lamps, attached to the ends of long ropes, were sent down into the depths of the well, and it was then discovered that the last four ladders were missing.

There is no doubt that all communication between the inside and outside of the Dochart pit had been intentionally broken.

"What are we waiting for, sir?" asked the impatient Jack Ryan.

"We'll wait until those lamps are brought up, my boy," replied Sir W. Elphiston. "Then we'll go down to the floor of the last gallery, and you'll lead us..."

"To the cottage!" cried Jack Ryan, "and if need be, to the very depths of the pit!"

As soon as the lamps were removed, the workers secured the rope ladders to the landing, which were then lowered into the shaft. The lower landings were still in place. It was possible to descend from one to the other.

This was not achieved without great difficulty. Jack Ryan was the first to hang from these shaky ladders, and he was the first to reach the bottom of the coal mine.

Sir W. Elphiston and the agents soon joined him.

The roundabout, formed by the bottom of the Yarow shaft, was completely deserted, but Sir W. Elphiston was not insignificantly surprised to hear Jack Ryan exclaim:

"Here are some fragments of the ladders, and they are half-burned fragments!"

"Burned!" repeated Sir W. Elphiston. "Indeed, these are ashes that have been cold for a long time!"

"Do you think, sir," asked Jack Ryan, "that the engineer James Starr had any interest in burning those ladders and cutting off all communication with the outside world?"

“No,” replied Sir W. Elphiston, who remained thoughtful. “Come, my boy, to the cottage! That’s where we’ll learn the truth.”

Jack Ryan nodded, looking unconvinced. But, taking a lamp from an agent, he advanced quickly through the main gallery of the Dochart pit.

They all followed him.

A quarter of an hour later, Sir W. Elphiston and his companions had reached the excavation at the bottom of which Simon Ford's cottage was built. No light shone through its windows.

Jack Ryan rushed towards the door, which he quickly pushed open.

The cottage was abandoned.

We visited the rooms of the dark house. There was no sign of violence inside. Everything was in order, as if old Madge were still there. The food supply was even plentiful and would have lasted the Ford family several days.

The absence of the cottage's guests was therefore inexplicable. But could one determine precisely when they had left? — Yes, because, in this environment where neither nights nor days followed one another, Madge was in the habit of marking each date on her calendar with a cross.

This calendar hung on the wall of the room. The last entry had been made on December 6th, one day after James Starr's arrival—a fact Jack Ryan was able to confirm. It was therefore clear that since December 6th, ten days prior, Simon Ford, his wife, his son, and their guest had left the cottage. Could a new exploration of the pit, undertaken by the engineer, explain such a long absence? No, obviously not.

So, at least, Sir W. Elphiston thought. After having thoroughly inspected the cottage, he was very perplexed as to what should be done.

The darkness was profound. The glow of the lamps, swung in the hands of the agents, only pierced this impenetrable gloom.

Suddenly, Jack Ryan let out a cry.

"There! There!" he said.

And his finger showed a rather bright glow, which flickered in the distant darkness of the gallery.

"My friends, let us run upon this fire!" replied Sir W. Elphiston.

"A brawnie fire!" cried Jack Ryan. "What good will it do? We'll never reach it!"

The president of the Royal Institution and the agents, not inclined to credulity, rushed off in the direction indicated by the moving light. Jack Ryan, bravely taking his side, was not left behind.

It was a long and tiring chase. The luminous lantern seemed to be carried by a small but remarkably agile being. Every moment, this being disappeared behind some embankment; then it would reappear at the end of a cross tunnel. Swift maneuvers would then take it out of sight. It seemed to have vanished for good, and suddenly, the glow of its lantern would shine brightly once more. In short, they were making little progress on it, and Jack Ryan persisted in believing, not without reason, that they would never catch it.

For an hour of this fruitless pursuit, Sir W. Elphiston and his companions ventured deeper into the southwest portion of the Dochart pit. They, too, were beginning to wonder if they were dealing with some elusive will-o'-the-wisp.

At that moment, however, it seemed that the distance between the sprite and those seeking to catch it began to diminish. Was it fatigue of whatever being was fleeing, or did this being wish to lure Sir W. Elphiston and his companions to where the inhabitants of the cottage might themselves have been drawn? It would have been difficult to resolve the question.

However, seeing the distance diminish, the agents redoubled their efforts. The light, which had always shone more than two hundred paces ahead of them, was now less than fifty. This interval decreased further. The torchbearer became more visible. Sometimes, when he turned his head, one could make out the vague outline of a human figure, and, unless a leprechaun had taken that form, Jack Ryan was forced to admit that it was not a supernatural being.

And then, while running faster:

"Come on, comrades!" he shouted. "He's getting tired! We'll catch him soon, and if he speaks as well as he runs, he'll be able to tell us a lot!"

However, the pursuit became more difficult then. Indeed, in the depths of the pit, narrow tunnels crisscrossed like the paths of a labyrinth. In this maze, the torchbearer could easily escape the agents.

All he had to do was turn off his lantern and throw himself aside into the depths of some dark refuge.

"And, by the way," thought Sir W. Elphiston, "if he wants to escape us, why doesn't he?"

This elusive being had not done so until then; but, at the moment when this thought crossed Sir W. Elphiston's mind, the light suddenly disappeared, and the agents, continuing their pursuit, arrived almost immediately before a narrow opening that the schist rocks left between them, at the end of a narrow tunnel.

For Sir W. Elphiston, Jack Ryan and their companions, slipping through after rekindling their lamps, and darting through the opening that lay before them, was a matter of a moment.

But they had not gone a hundred steps in a new gallery, wider and higher, before they suddenly stopped.

There, near the wall, four bodies were lying on the ground, four corpses perhaps!

“James Starr!” said Sir W. Elphiston.

"Harry! Harry!" cried Jack Ryan, rushing over his comrade's body.

It was, in fact, the engineer, Madge, Simon and Harry Ford, who were lying there, motionless.

But then, one of the bodies sat up, and the weary voice of old Madge could be heard murmuring these words:

"Them! Them first!"

Sir W. Elphiston, Jack Ryan, and the agents tried to revive the engineer and his companions by giving them a few drops of cordial. They succeeded almost immediately. These unfortunate men, held captive for ten days in New Aberfoyle, were dying of starvation.

And if they hadn't succumbed during this long imprisonment—James Starr told Sir W. Elphiston this—it was because three times they had found a loaf of bread and a jug of water near them! No doubt, the helpful being to whom they owed their continued life could not have done more!

Sir W. Elphiston wondered if this was the work of that elusive sprite who had just lured them precisely to the place where James Starr and his companions lay.

In any case, the engineer, Madge, Simon, and Harry Ford were safe. They were escorted back to the cottage, passing through the narrow exit that the torchbearer seemed to have intended to show Sir W. Elphiston.

And if James Starr and his companions had not been able to find the opening of the gallery that the dynamite had opened for them, it was because this opening had been firmly blocked by means of superimposed rocks, which, in this deep darkness, they had been unable to recognize or separate.

So, while they were exploring the vast crypt, all communication between Old and New Aberfoyle had been deliberately cut off by an enemy hand!

XIII

Coal-city

Three years after the events just described, the Joanne or Murray Guides recommended, "as a major attraction", to the many tourists who travelled through Stirling County, a visit of a few hours to the New Aberfoyle coal mines.

No mine, in any country of the new or old world, presented a more curious appearance.

First, the visitor was transported safely and effortlessly to the floor of the operation, fifteen hundred feet below the surface of the county.

Indeed, seven miles southwest of Callander, an oblique tunnel, adorned with a monumental entrance, complete with turrets, crenellations, and machicolations, protruded from the ground. This gently sloping, largely hollowed-out tunnel led directly to this crypt, so singularly carved into the Scottish bedrock.

A double railway, whose wagons were powered by hydraulic force, served, hourly, the village which had been founded in the subsoil of the county, under the perhaps somewhat ambitious name of "Coal-city", that is to say the City of Coal.

The visitor, having arrived in Coal-city, found himself in an environment where electricity played a primary role, as an agent of heat and light.

Indeed, the ventilation shafts, though numerous, could not have allowed enough daylight into the profound darkness of New Aberfoyle. However, an intense light filled this somber environment, where numerous electric discs replaced the sun. Suspended beneath the intrados of the vaults, attached to the natural pillars, all powered by direct currents produced by electromagnetic machines—some representing suns, others stars—they broadly illuminated the area. When it was time to rest, a simple switch was all that was needed to artificially create night in these deep abysses of the coal mine.

All these devices, large and small, operated in a vacuum, meaning their luminous arcs had no contact whatsoever with the surrounding air. Therefore, even if the atmosphere had been contaminated with firedamp in a potentially explosive proportion, no explosion would have been to be feared. Consequently, electricity was invariably used for all the needs of industrial and domestic life, both in the houses of Coal City and in the working galleries of New Aberfoyle.

First and foremost, it must be said that engineer James Starr's predictions regarding the operation of the new coal mine had not been disappointed. The richness of the coal seams was incalculable. It was west of the crypt, a quarter of a mile from Coal-city, that the first veins had been struck by the miners' picks. The workers' town, therefore, did not occupy the center of the operation. The underground workings were directly connected to the surface workings by ventilation and extraction shafts, which linked the various levels of the mine to the ground. The large tunnel, where the hydraulic railway operated, served only to transport the inhabitants of Coal-city.

We remember the singular shape of that vast cavern, where the old overman and his companions had stopped during their first exploration. There, above their heads, rounded a dome with an ogival curvature. The pillars that supported it disappeared into the schist vault, at a height of three hundred feet—a height almost equal to that of the "Mammoth Dome" in the Kentucky caves.

We know that this enormous hall—the largest in the entire American hypogeum—can easily hold five thousand people. In this part of New Aberfoyle, it was the same proportion and the same layout. But, instead of the admirable stalactites of the famous cave, here the eye was drawn to swellings of Carboniferous veins, which seemed to burst forth from all the walls under the pressure of the schist faults. They looked like jet-black sculptures in the round, their sparkles gleaming in the sunlight.

Below this dome lay a lake comparable in size to the Dead Sea of the "Mammoth-Caves" — a deep lake whose transparent waters teemed with eyeless fish, and which the engineer named Lake Malcolm.

It was there, in that immense natural excavation, that Simon Ford had built his new cottage, and he would not have exchanged it for the finest hotel on Princes Street in Edinburgh. This dwelling was situated on the edge of the lake, and its five windows opened onto the dark waters, which stretched beyond the limit of sight.

Two months later, a second house had sprung up near Simon Ford's cottage. It belonged to James Starr. The engineer had devoted himself wholeheartedly to New Aberfoyle. He, too, had wanted to live there, and it took a compelling business decision for him to agree to leave the site. There, indeed, he lived surrounded by his world of miners.

Since the discovery of the new deposits, all the workers from the old coal mine had hastened to abandon the harrow and the harrow to take up the pick or the shovel again. Attracted by the certainty that they would never lack work, enticed by the high wages that the prosperity of the operation would allow them to pay to the workforce, they had left the surface for the underground, and had settled in the coal mine, which, by its natural layout, lent itself to this settlement.

These miners' houses, built of brick, had gradually arranged themselves in a picturesque fashion, some on the shores of Lake Malcolm, others under arches that seemed made to withstand the thrust of the vaults like the buttresses of a cathedral. Pickers who cut the rock, haulers who transported the coal, foremen, timbermen who shored up the galleries, roadmen entrusted with the repair of the tracks, backfillers who replaced the coal with stone in the mined areas—all these workers, in short, who were more specifically employed in the underground work, settled in New Aberfoyle and gradually founded Coal City, located below the eastern tip of Lake Katrine, in the north of Stirling County.

It was therefore a kind of Flemish village, which had risen on the shores of Lake Malcolm. A chapel, erected under the invocation of Saint Giles, dominated this whole ensemble from the top of an enormous rock, whose base was bathed in the waters of this subterranean sea.

When this underground village was illuminated by the bright rays projected by the discs suspended from the dome's pillars or the arches of the side aisles, it presented a somewhat fantastical aspect, with a strange effect, which justified the recommendation of the Murray or Joanne Guides. This is why visitors flocked there.

It goes without saying that the residents of Coal City were proud of their new home. Consequently, they rarely left the workers' housing estate, much like Simon Ford, who never wanted to leave it. The old foreman claimed it always rained "up there," and, given the climate of the United Kingdom, one has to admit he wasn't entirely wrong. Families in New Aberfoyle were therefore prospering. For three years, they had enjoyed a certain level of comfort they would never have achieved on the surface of the county. Many babies born when work resumed had never even breathed the outside air.

Which led Jack Ryan to say:

"It's been eighteen months since they stopped suckling their mothers, and yet they haven't seen the light of day!" It should be noted, in this regard, that one of the first to answer the engineer's call was Jack Ryan. This jovial fellow had made it his duty to resume his old profession. Melrose Farm had thus lost its singer and its regular piper. But that's not to say that Jack Ryan had stopped singing. On the contrary, and the resounding echoes of New Aberfoyle were wearing out their stone lungs answering him.

Jack Ryan had settled into Simon Ford's new cottage. He had been offered a room, which he accepted without hesitation, being the simple and straightforward man he was. Old Madge liked him for his good nature and cheerful disposition. She shared some of his ideas about the fantastical beings that were supposed to haunt the coal mine, and when they were alone, the two of them would tell each other chilling stories, tales worthy of enriching Hyperborean mythology.

Jack Ryan thus became the joy of the cottage. He was, moreover, a good fellow, a solid worker. Six months after the resumption of work, he was head of a brigade of underground workers.

"That's a fine piece of work, Mr. Ford," he said a few days after his installation. "You've struck gold, and if you almost paid for this discovery with your life, well, that's not too high a price to pay!"

"No, Jack, it's actually a good deal we've made!" replied the old overman. "But neither Mr. Starr nor I will ever forget that we owe our lives to you!"

"No, no," Jack Ryan replied. "It belongs to your son Harry, since he had the good sense to accept my invitation to Irvine's party..."

"And not to go, is that right?" replied Harry, squeezing his friend's hand. "No, Jack, it's thanks to you, barely recovered from your wounds, to you,

who didn't waste a day or an hour, that we were found alive in the coal mine!"

"Well, no!" retorted the stubborn boy. "I won't let people say things that aren't true! I did my best to find out what had become of you, Harry, and that's all there is to it. But, to give credit where credit is due, I'll add that without that elusive imp..."

"Ah! There we are!" cried Simon Ford. "A leprechaun!"

"A leprechaun, a brawnie, a fairy's son," repeated Jack Ryan, "a grandson of the Ladies of Fire, an Urisk, whatever you want to call him! It is nonetheless certain that, without him, we would never have entered the gallery, from which you could no longer escape!"

"No doubt, Jack," replied Harry. "It remains to be seen whether this being is as supernatural as you want to believe."

"Supernatural!" cried Jack Ryan. "But he's as supernatural as a will-o'-the-wisp, the kind you see running with a lantern in hand, the kind you try to catch, that slips away like a sylph, that vanishes like a shadow! Don't worry, Harry, we'll see him again someday!"

"Well, Jack," said Simon Ford, "wisp or not, we'll try to find him, and you'll have to help us with that."

"You'll be making a bad deal, Mr. Ford!" replied Jack Ryan.

"Okay! Let it come, Jack!"

One can easily imagine how familiar this estate in New Aberfoyle soon became to the members of the Ford family, and especially to Harry. He learned its most secret recesses. He even came to be able to say exactly where on the surface of the ground each point corresponded to in the coalfield. He knew that above this seam lay the Gulf of Clyde, that there lay Lake Lomond or Lake Katrine. Those pillars were a buttress of the Grampian Mountains they supported. That vault served as the foundation for Dumbarton. Above this broad pond ran the Balloch railway. There the Scottish coastline ended. There the sea began, whose crashing could be heard distinctly during the great storms of the equinox. Harry would have been a wonderful "leader" of these natural catacombs, and, what guides in the Alps do on snowy peaks in broad daylight, he would have done in the coal mine in full shadow, with incomparable sureness of instinct.

And how he loved New Aberfoyle! How often, his lamp in his hat, he ventured into its deepest depths! He explored its ponds in a canoe he maneuvered skillfully. He even hunted, for many wild birds had made their way into the crypt—pintails, snipe, scoters—feeding on the fish that teemed in those dark waters. It seemed that Harry's eyes were attuned to the shadows, like a sailor's eyes to distant horizons.

But, running like this, Harry was irresistibly drawn along by the hope of finding the mysterious being whose intervention, to tell the truth, had saved him more than anyone else, and his family along with him. Would he succeed? Yes, without a doubt, if he believed his premonitions. No, if he were to conclude from the limited success his search had achieved so far.

As for the attacks directed against the old overman's family, prior to the discovery of New Aberfoyle, they had not been repeated.

That's how things were in this strange domain.

One should not imagine that, even at the time when the outlines of Coal-city were barely taking shape, all distraction was excluded from the underground city, and that existence there was monotonous.

Nothing could be further from the truth. This population, sharing the same interests, the same tastes, and roughly the same level of comfort, was, in truth, one large family. They knew each other, they rubbed shoulders, and the need to seek pleasure outside the home was hardly felt.

Moreover, every Sunday, walks in the coal mine, excursions on the lakes and ponds, were all pleasant distractions.

Often, the sounds of bagpipes could be heard echoing along the shores of Lough Malcolm. Scots flocked to the sound of their national instrument. There was dancing, and on that day, Jack Ryan, dressed in his Highlander costume, was the life of the party.

Finally, according to Simon Ford, all of this meant that Coal-city could already present itself as a rival to the capital of Scotland, a city subjected to the cold of winter, the heat of summer, the inclement weather of a detestable climate, and which, in an atmosphere choked with the smoke of its factories, justified its nickname of "Old Smoky City" all too well.

XIV

Suspended by a thread

Under such circumstances, with his dearest wishes fulfilled, Simon Ford's family was happy. However, it could be observed that Harry, already somewhat withdrawn, was becoming increasingly somber, as Madge put it. Jack Ryan, despite his infectious good humor, couldn't seem to draw him out.

One Sunday—it was in June—the two friends were strolling along the shores of Lake Malcolm. Coal City was quiet. Outside, the weather was stormy. Heavy rains were causing a hot mist to rise from the ground. The air was thick across the county.

In contrast, at Coal-city, there was absolute calm, mild temperatures, and neither rain nor wind. Nothing betrayed the struggle of the elements outside. Consequently, a number of walkers from Stirling and the surrounding area had come seeking a bit of coolness in the depths of the coal mine.

The electric records cast a brilliance that the British sun, more hazy than befits a Sunday sun, would certainly have envied.

Jack Ryan pointed out this boisterous competition of visitors to his friend Harry. But Harry seemed to pay little attention to his words.

"Look, Harry!" cried Jack Ryan. "What a rush to come and see us! Come on, my friend! Put away your gloomy thoughts for a moment and do our estate proud! You'd make all those people up above think they could envy their lot!"

"Jack," replied Harry, "don't worry about me! You're cheerful enough for two, and that's enough!"

"May old Nick take me away!" retorted Jack Ryan, "if your melancholy doesn't eventually rub off on me! My eyes are darkening, my lips are tightening, laughter is stuck in my throat, my memory of songs is failing me! Come now, Harry, what's wrong?"

— You know that, Jack.

— Still thinking that?...

- Always.

"Ah! My poor Harry!" replied Jack Ryan, shrugging his shoulders, "if, like me, you blamed it all on the mine elves, you would have a much clearer mind!"

— You know very well, Jack, that goblins only exist in your imagination, and that, since the resumption of work, not a single one has been seen in New Aberfoyle.

— Fine, Harry! But if the brawnies aren't showing up anymore, it seems to me that those to whom you want to report all these extraordinary things aren't showing up either!

— I'll find them, Jack!

— Ah! Harry! Harry! The geniuses of New Aberfoyle are not easily surprised!

"I will find them, your so-called geniuses!" Harry resumed with the accent of the most energetic conviction.

— So, you intend to punish?...

— Punish and reward, Jack. If one hand imprisoned us in this gallery, I don't forget that another hand rescued us! No! I don't forget it!

"Hey, Harry!" replied Jack Ryan, "are you quite sure that these two hands don't belong to the same body?"

— Why, Jack? Where did you get that idea?

— Lady... you know... Harry! These beings, who live in the abyss... are not made like us!

— They're made just like us, Jack!

— Oh no! Harry... no... Besides, couldn't we suppose that some madman managed to get in...

"A madman!" replied Harry. "A madman who would follow through on his ideas like that! A madman, that evildoer who, ever since the day he broke the ladders in Yarow's Well, has never stopped harming us!"

— But he hasn't done it anymore, Harry. For three years, no malicious acts have been repeated against you or your family!

“It doesn’t matter, Jack,” Harry replied. “I have a feeling that this evil being, whoever he is, hasn’t given up on his plans. What makes me say

this to you, I couldn’t say. So, Jack, for the sake of the new farm, I want to know who he is and where he comes from.”

"In the interest of the new operation?" asked Jack Ryan, quite surprised.

“Yes, Jack,” Harry continued. “I don’t know if I’m mistaken, but I see in this whole affair an interest contrary to our own. I’ve often thought about it, and I don’t think I’m wrong. Remember the series of these inexplicable events, which follow logically from one to the next. This anonymous letter, contradicting my father’s, proves, first of all, that someone knew of our plans and wanted to prevent their completion. Mr. Starr came to visit us at the Dochart pit. No sooner had I shown him in than an enormous rock was hurled at us, and all communication was immediately cut off by the collapse of the ladders in the Yarow shaft. Our exploration began. An experiment, which was to reveal the existence of the new deposit, was then rendered impossible by the sealing of the fissures in the shale. Nevertheless, the discovery was made, the vein was found. We retraced our steps.” A great gust of wind swept through the air. Our lamp shattered. Darkness enveloped us. We managed, however, to follow the gloomy tunnel... There was no way out. The opening was blocked. We were trapped. Well, Jack, don't you see a criminal motive in all this? Yes! A being, elusive until now, but not supernatural, as you persist in believing, was hidden in the coal mine. For some reason I cannot comprehend, it sought to prevent us from entering. It was there!... A premonition tells me it's still there, and who knows if it isn't plotting some terrible deed! — Well, Jack, even if I risk my life, I will find out!

Harry had spoken with a conviction that seriously shook his classmate.

Jack Ryan sensed that Harry was right—at least in the past. Whether these extraordinary events had a natural or supernatural cause, they were nonetheless evident.

However, the brave boy did not abandon his explanation for these events. But, understanding that Harry would never admit the intervention of a mysterious genie, he fell back on the incident that seemed irreconcilable with the feeling of malevolence directed against the Ford family.

"Well, Harry," he said, "if I am obliged to agree with you on a number of points, won't you agree with me that some benevolent brawny, by bringing you bread and water, may have saved you from..."

"Jack," Harry interrupted, "the helpful being you want to make into a supernatural being exists as really as the wrongdoer in question, and I

will search for both of them in the deepest recesses of the coal mine."

"But do you have any clues that could guide your search?" asked Jack Ryan.

“Perhaps,” replied Harry. “Listen to me carefully. Five miles west of New Aberfoyle, beneath the portion of the massif that supports the Lomond, there is a natural shaft that plunges perpendicularly into the very heart of the deposit. Eight days ago, I tried to sound its depth. Now, as my sounding line descended, while I was leaning over the opening of this shaft, it seemed to me that the air inside was agitated, as if it were being beaten with great blows of wings.”

"It was some stray bird in the lower galleries of the coal mine," replied Jack.

"That's not all, Jack," Harry continued. "This very morning, I went back to that well, and there, listening closely, I thought I heard a sort of moaning..."

"A moan!" cried Jack. "You're mistaken, Harry! It's a rush of air... unless it's a leprechaun..."

"Tomorrow, Jack," Harry continued, "I'll know where I stand."

"Tomorrow?" replied Jack, looking at his friend.

— Yes! Tomorrow, I will descend into that abyss.

— Harry, that's tempting God!

"No, Jack, because I'll beg his help to get down there. Tomorrow, we'll both go to that well with some of our comrades. A long rope, to which I'll tie myself, will allow you to lower me down and pull me out at an agreed-upon signal." "Can I count on you, Jack?"

"Harry," replied Jack Ryan, nodding his head, "I will do as you ask, and yet, I repeat, you are wrong."

“It’s better to be wrong than to regret not having done it,” said Harry resolutely. “So, tomorrow morning at six o’clock, and silence! Goodbye, Jack!”

And, so as not to continue a conversation in which Jack Ryan would have tried again to fight his plans, Harry abruptly left his companion and returned to the cottage.

It must be admitted, however, that Jack's fears were not exaggerated. If some personal enemy threatened Harry, if he was at the bottom of that well where the young miner was going to find him, Harry was putting himself at risk. However, how likely was it to believe that this was the case?

"And besides," Jack Ryan kept repeating, "why go to so much trouble to explain a series of events that could be so easily explained by the supernatural intervention of the mine's spirits?"

In any case, the next day, Jack Ryan and three miners from his brigade arrived with Harry at the opening of the suspicious well.

Harry hadn't said a word about his plan, neither to James Starr nor to the old overman. For his part, Jack Ryan had been discreet enough not to speak. The other miners, seeing them leave, had thought it was just a simple exploration of the deposit along its vertical cross-section.

Harry had brought along a long rope, two hundred feet in length. It wasn't thick, but it was strong. Since Harry wouldn't be using his wrists to descend or ascend, it was enough that the rope be strong enough to support his weight. His companions would be responsible for lowering him into the chasm and pulling him out. A jerk on the rope would serve as a signal between them and him.

The well was quite wide, twelve feet in diameter at its opening. A beam was placed across it, like a bridge, so that the rope, as it slid across the surface, would remain aligned with the well's axis. This precaution was essential to ensure that Harry wouldn't be struck by the side walls during the descent.

Harry was ready.

"Are you still planning to explore that abyss?" Jack Ryan asked him in a low voice.

"Yes, Jack," replied Harry.

The rope was first tied around Harry's waist, then under his armpits, so that his body could not tip over.

Thus restrained, Harry had both hands free. From his belt, he hung a safety lamp, and at his side, one of those broad Scottish knives sheathed in a leather scabbard.

Harry walked to the middle of the beam, around which the rope was passed.

Then, as his companions let him slide down, he slowly descended into the well. As the rope underwent a slight rotation, the light from his lamp fell successively on each point of the walls, and Harry was able to examine them carefully.

These walls were made of coal shale. They were smooth enough that it was impossible to climb onto their surface.

Harry calculated that he was descending at a moderate speed, about one foot per second. He therefore had good visibility and could easily be prepared for any eventuality.

After two minutes, at a depth of about 120 feet, the descent had been completed without incident. There were no side galleries in the wall of the shaft, which gradually narrowed into a funnel shape. But Harry was beginning to feel a cooler breeze coming from below—from which he concluded that the lower end of the shaft connected with some passage on the lower level of the crypt.

The rope kept slipping. The darkness was absolute. The silence, too. If any living being, whatever it might be, had sought refuge in this mysterious and deep abyss, either it wasn't there then, or no movement betrayed its presence.

Harry, growing more defiant as he went downstairs, had pulled the knife from its sheath, and was holding it in his right hand.

At a depth of 180 feet, Harry felt he had reached the bottom, for the rope went slack and stopped unwinding. Harry breathed for a moment. One of his fears had not materialized: that the rope might have snapped above him during his descent. Moreover, he hadn't noticed any crevices in the walls that might have concealed any creature.

The lower end of the well was very narrow.

Harry unfastened the lamp from his belt and ran it along the ground. He had not been wrong in his assumptions.

A narrow tunnel led laterally into the lower level of the deposit. One would have had to bend down to enter it, and crawl on one's hands to follow it.

Harry wanted to see in which direction this gallery branched off, and if it led to some abyss.

He lay down on the ground and began to crawl. But an obstacle stopped him almost immediately.

He thought he could feel by touch that this obstacle was a body blocking the passage.

Harry recoiled, at first, with a strong feeling of repulsion, then he came back.

His senses had not deceived him. What had stopped him was, in fact, a body. He seized it and realized that, frozen at the extremities, it was not yet completely cold.

To draw him towards you, to bring him back to the bottom of the well, to shine the light of the lamp on him, it was done in less time than it takes to say it.

"A child!" Harry exclaimed.

The child, found at the bottom of the abyss, was still breathing, but his breath was so weak that Harry thought he might stop. They had to, therefore, without losing a moment, bring the poor little creature back to the well's mouth and take him to the cottage, where Madge would care for him.

Harry, forgetting all other concerns, adjusted the rope at his belt, attached his lamp to it, took the child and supported him with his left arm against his chest, and, keeping his right arm free and armed, he gave the agreed signal, so that the rope would be hauled gently.

The rope tightened, and the ascent began to proceed steadily.

Harry looked around him with renewed focus. He was no longer the only one exposed now.

Everything went smoothly for the first few minutes of the ascent; no incident seemed likely, when Harry thought he heard a powerful gust of air moving through the depths of the shaft. He looked down and saw, in the gloom, a mass that rose gradually and brushed past him.

It was an enormous bird, whose species he could not identify, and which was rising with powerful wingbeats.

The monstrous bird stopped, hovered for a moment, then swooped down on Harry with ferocious ferocity.

Harry only had his right arm which he could use to parry the blows of the animal's formidable beak.

So Harry defended himself, protecting the child as best he could. But it wasn't the child; it was Harry the bird was attacking. Hindered by the rope's rotation, it couldn't land a fatal blow.

The struggle continued. Harry shouted at the top of his lungs, hoping his cries would be heard from above.

That is what happened, because the rope was immediately hauled in faster.

There was still a height of eighty feet to climb. The bird then swooped down more violently on Harry. Harry, with a blow of his knife, wounded it in the wing; the bird, letting out a raucous cry, disappeared into the depths of the well.

But, in a terrible turn of events, Harry, in brandishing his knife to strike the bird, had cut into the rope, one strand of which was now severed.

Harry's hair stood on end.

The rope was gradually giving way, more than a hundred feet above the bottom of the abyss!

Harry let out a desperate cry.

A second strand was missing under the double burden borne by the half-cut rope.

Harry dropped his knife, and, with a superhuman effort, just as the rope was about to break, he managed to grasp it with his right hand above the section. But, although his wrist was made of iron, he felt the rope gradually slip through his fingers.

He could have grabbed that rope with both hands, sacrificing the child he was supporting with one arm... He didn't even want to think about it.

However, Jack Ryan and his companions, overexcited by Harry's shouts, were panting more heavily.

Harry thought he wouldn't be able to hold on until he reached the well's opening. His face flushed. He closed his eyes for a moment, expecting to

fall into the abyss, then opened them again...

But, just as he was about to let go of the rope, which he was now only holding by its end, he was seized and placed on the ground with the child.

The reaction then occurred, and Harry fell unconscious into the arms of his comrades.

XV

Nell at the cottage

Two hours later, Harry, who had not immediately regained his senses, and the child, whose weakness was extreme, arrived at the cottage with the help of Jack Ryan and his companions.

There, the story of these events was told to the old overman, and Madge lavished care on the poor creature, whom her son had just saved.

Harry had thought he was pulling a child from the abyss... She was a girl of fifteen or sixteen at most. Her vague, astonished gaze, her thin face, elongated by suffering, her fair complexion that light seemed never to have touched, her frail, small stature—all of this made her a being both strange and charming. Jack Ryan, with some justification, compared her to a leprechaun with a slightly supernatural appearance. Was it due to the particular circumstances, to the exceptional environment in which this girl had perhaps lived until then, but she seemed to belong only half to humanity. Her features were strange. Her eyes, which the brightness of the cottage lamps seemed to tire, gazed confusedly, as if everything were new to them.

To this singular being, then placed on Madge's bed and who came back to life as if emerging from a long sleep, the old Scottish woman first addressed her words:

"What is your name?" she asked him.

"Nell," replied the young girl.

"Nell," Madge continued, "are you suffering?"

"I'm hungry," Nell replied. "I haven't eaten since... since..."

From the few words she had just uttered, one could tell that Nell was not used to speaking. The language she was using was that old Gaelic, which Simon Ford and his people often used.

Upon hearing the girl's reply, Madge immediately brought her some food. Nell was starving. How long had she been at the bottom of that well? No one could say.

"How many days did you spend there, my daughter?" asked Madge.

Nell did not answer. She did not seem to understand the question being asked of her.

"For how many days?" Madge continued.

"Days?..." replied Nell, for whom this word seemed to be devoid of any meaning.

Then she shook her head like someone who doesn't understand what she's being asked.

Madge had taken Nell's hand and was caressing it to give her complete confidence.

"How old are you, my daughter?" she asked, giving her kind, reassuring eyes.

Nell also showed a negative sign.

"Yes, yes," Madge continued, "how many years?"

"Years?" replied Nell.

And this word, no more than the word "day", seemed to have any meaning for the young girl.

Simon Ford, Harry, Jack Ryan, and his companions looked at her with a mixture of pity and sympathy. The poor creature's condition, clad in a miserable coat of coarse cloth, was enough to make a strong impression on them.

Harry, more than anyone else, felt irresistibly drawn to Nell's very strangeness.

He then approached. He took in his hand the hand that Madge had just let go of. He looked Nell straight in the eye, her lips forming a sort of smile, and he said to her:

"Nell... over there... in the coal mine... were you alone?"

"Alone! Alone!" cried the young girl, straightening up.

Her face then betrayed the terror. Her eyes, which had softened under the young man's gaze, became wild again.

"Alone! Alone!" she repeated, and she fell back onto Madge's bed, as if her strength had completely failed her.

"This poor child is still too weak to answer us," said Madge, after putting the girl back to bed. "A few hours of rest, some good food, will restore her strength. Come, Simon! Come, Harry! Come all of you, my friends, and let sleep do its work!"

On Madge's advice, Nell was left alone, and it was confirmed a moment later that she was fast asleep.

This event caused quite a stir, not only in the coal mine, but also in Stirling County, and soon after, throughout the United Kingdom. Nell's reputation for strangeness only increased. Had a young girl been found encased in shale, like one of those antediluvian beings freed from their stony shell by a pickaxe, the affair would have been no more sensational.

Without realizing it, Nell became quite fashionable. Superstitious people found in her a new subject for their legendary tales. They readily believed that Nell was the genie of New Aberfoyle, and when Jack Ryan told his friend Harry:

“So be it,” replied the young man, concluding, “so be it, Jack! But in any case, it’s the good genie! It’s the one who rescued us, who brought us bread and water when we were trapped in the coal mine! It can only be him! As for the evil genie, if he’s still in the mine, we’ll have to find him one day!”

As one might expect, engineer James Starr was informed first of what had happened.

The young girl, having regained her strength the day after her arrival at the cottage, was questioned by him with the utmost care. She seemed to be ignorant of most aspects of life. However, she was intelligent, as was soon recognized, but she lacked certain basic concepts: the concept of time, among others. It was clear that she had never been accustomed to dividing time into hours or days, and that these very words were foreign to her. Furthermore, her eyes, accustomed to the night,

struggled to adjust to the glare of the electric discs; but in the darkness, her gaze possessed extraordinary acuity, and her pupils, widely dilated, allowed her to see in the deepest shadows. It was also clear that her mind had never received impressions of the outside world, that no horizon other than that of the coal mine had opened up to her, that all of humanity had been confined to her in that dark crypt. Did this poor girl know that there was a sun and stars, cities and countryside, a universe teeming with worlds? One had to doubt it until certain words that she did not yet know took on a precise meaning in her mind.

As for the question of whether Nell lived alone in the depths of New Aberfoyle, James Starr had to abandon any attempt to resolve it. Indeed, any allusion to the subject filled that strange creature with dread. Either Nell couldn't, or she wouldn't, answer; but surely, there was some secret there that she might have revealed.

"Do you want to stay with us? Do you want to go back to where you were?" James Starr had asked him.

To the first of these two questions, the girl had said, "Oh yes!" To the second, she had only responded with a cry of terror, but nothing more.

Faced with this obstinate silence, James Starr, and with him Simon and Harry Ford, could not help but feel a certain apprehension. They could not forget the inexplicable events that had accompanied the discovery of the coal mine. Now, although no new incident had occurred for three years, they still expected some new attack from their invisible enemy. Therefore, they decided to explore the mysterious shaft. They did so, well-armed and well-accompanied. But they found no suspicious traces. The shaft connected to the lower levels of the crypt, hewn into the Carboniferous layer.

James Starr, Simon, and Harry often talked about these things. If one or more malevolent beings were hiding in the coal mine, if they were plotting some ambush, Nell might have said so, but she didn't speak. The slightest allusion to the girl's past provoked fits, and it seemed best not to press the matter. In time, her secret would probably slip from her grasp.

Two weeks after her arrival at the cottage, Nell was old Madge's most intelligent and zealous helper. Naturally, never to leave this house where she had been so kindly welcomed seemed perfectly natural to her, and perhaps she couldn't even imagine that she might now live anywhere else. The Ford family was enough for her, and it goes without

saying that, in the minds of these good people, from the moment Nell entered the cottage, she had become their adopted child.

Nell was charming, truly. Her new life made her more beautiful. These were undoubtedly the first happy days of her life. She felt full of gratitude for those to whom she owed them. Madge had developed a maternal affection for Nell. The old overman soon adored her in turn. Everyone loved her, in fact. Her friend Jack Ryan regretted only one thing: not having saved her himself. He often came to the cottage. He sang, and Nell, who had never heard anyone sing, found it quite beautiful; but it was clear that the young girl preferred Harry's more serious conversations to Jack Ryan's songs. Harry, little by little, taught her what she still didn't know about the outside world.

It must be said that, ever since Nell had appeared in her true form, Jack Ryan had been forced to admit that his belief in leprechauns was waning to some extent. Furthermore, two months later, his credulity suffered another blow.

Indeed, around this time, Harry made a rather unexpected discovery, but one that partly explained the appearance of the Fire Ladies in the ruins of Dundonald Castle, in Irvine.

One day, after a long exploration of the southern part of the coal mine—an exploration that had lasted several days through the final galleries of this enormous substructure—Harry had laboriously climbed a narrow tunnel, hollowed out in a gap in the shale rock. Suddenly, he was very surprised to find himself in the open air. The tunnel, after ascending obliquely toward the surface, led directly to the ruins of Dundonald Castle. There was, therefore, a secret passage between New Aberfoyle and the hill crowned by the old castle. The upper opening of this tunnel would have been impossible to discover from the outside, so completely was it obstructed by stones and brush. Consequently, during the investigation, the magistrates had been unable to enter it.

A few days later, James Starr, led by Harry, came to personally verify this natural feature of the coal deposit.

"There," he said, "that'll convince the superstitious people in the mine. Goodbye, brawnies, goblins, and Fire Ladies!"

"I don't think, Mr. Starr," replied Harry, "that we have any reason to be pleased! Their replacements are no better and may well be worse!"

“Indeed, Harry,” the engineer continued, “but what can be done? Obviously, the beings hiding in the mine communicate with the surface

through this tunnel. It was they, no doubt, who, torch in hand, during that turbulent night, lured the Motala to the shore, and, like the ancient wreckers, they would have plundered its wreckage, if Jack Ryan and his companions hadn't been there! In any case, at last, everything is explained. There's the entrance to the lair! As for those who lived there, do they still live there?"

"Yes, because Nell trembles when we talk to her about it!" Harry replied confidently. "Yes, because Nell doesn't want to or doesn't dare talk about it!" Harry must be right. If the mysterious inhabitants of the coal mine had abandoned her, or if they were dead, what reason would the girl have had to remain silent?

However, James Starr was determined to uncover this secret. He sensed that the future of the new operation might depend on it. So, the strictest precautions were taken once again. The magistrates were notified. Agents secretly occupied the ruins of Dundonald Castle. Harry himself hid for several nights amidst the undergrowth that bristled on the hillside. All in vain. Nothing was discovered. No human being appeared through the opening.

It was soon concluded that the criminals must have left New Aberfoyle for good, and that, as for Nell, they believed her dead at the bottom of the shaft where they had abandoned her. Before mining began, the coal mine could have offered them a safe haven, protected from any search. But since then, circumstances had changed. The hideout was becoming difficult to conceal. One might therefore have reasonably hoped that there was nothing more to fear in the future. However, James Starr was not entirely reassured. Harry, too, could not surrender, and he often repeated:

"Nell was obviously involved in this whole mystery. If she had nothing left to fear, why would she remain silent? There's no doubt she's happy to be with us! She loves us all! She adores my mother! If she's silent about her past, about what could reassure us about the future, then some terrible secret, which her conscience forbids her to reveal, is weighing on her! Perhaps, more for our sake than her own, she believes she must withdraw into this inexplicable silence!"

It was as a result of these various considerations that, by common agreement, it had been decided that anything that might remind the young girl of her past would be excluded from the conversation.

One day, however, Harry was led to reveal to Nell what James Starr, his father, his mother and he himself believed they owed to his

intervention.

It was a day of celebration. Arms were idle both above ground in Stirling County and below. People strolled about everywhere. Songs resounded in twenty places beneath the echoing vaults of New Aberfoyle.

Harry and Nell had left the cottage and were walking slowly along the left bank of Lake Malcolm. There, the electrical flashes were less intense, and their beams broke capriciously off the corners of some picturesque rocks that supported the dome. This twilight suited Nell's eyes better, as they were finding it very difficult to adjust to the light.

After an hour's walk, Harry and his companion stopped opposite the chapel of Saint-Gilles, on a kind of natural terrace overlooking the waters of the lake.

"Your eyes, Nell, are not yet used to the daylight," said Harry, "and certainly, they could not bear the glare of the sun."

"No, probably not," replied the girl, "if the sun is as you described it to me, Harry."

"Nell," Harry continued, "in speaking to you, I couldn't give you a true idea of its splendor, nor of the beauties of this world that your eyes have never seen." "But tell me," Harry continued, "is it possible that since the day you were born in the depths of the coal mine, you have never returned to the surface?"

"Never, Harry," replied Nell, "and I don't think that, even as a child, either a father or a mother ever carried me there. I certainly would have retained some memory of the outside world!"

“I believe it,” Harry replied. “Besides, in those days, Nell, many others besides you never left the mine. Communication with the outside world was difficult, and I knew more than one young boy or girl, at your age, who knew nothing of what you know of things up there! But now, in a few minutes, the railway through the great tunnel carries us to the surface of the county. So I look forward, Nell, to hearing you say to me, ‘Come, Harry, my eyes can bear the daylight, and I want to see the sun! I want to see God’s handiwork!’”

"I'll tell you, Harry," the girl replied, "before long, I hope. I'll go and admire this outside world with you, and yet..."

"What do you mean, Nell?" Harry asked sharply. "Do you have any regrets about having abandoned the dark abyss in which you lived during the first years of your life, and from which we pulled you out almost dead?"

“No, Harry,” Nell replied. “I was just thinking that the darkness is beautiful too. If you only knew what eyes accustomed to its depths see! There are shadows that pass by, and you long to follow them in their flight! Sometimes there are circles that intersect before your eyes, and you never want to leave them! Deep in the coal mine, there are black holes, full of faint lights. And then, you hear sounds that speak to you! You see, Harry, you have to have lived there to understand what I feel, what I can't express to you!”

— And you weren't afraid, Nell, when you were alone?

“Harry,” the girl replied, “it was when I was alone that I wasn’t afraid!” Nell’s voice had changed slightly as she spoke. Harry, however, felt he should press her a little, and he said:

"But one could get lost in those long galleries, Nell. Weren't you afraid of getting lost there?"

— No, Harry. I've known all the ins and outs of the new coal mine for a long time!

— Didn't you sometimes go out?...

— Yes.., sometimes..,” replied the young girl hesitantly, “sometimes I would come all the way to the old Aberfoyle mine.”

— So you knew about the old cottage?

— The cottage... yes... but only from a great distance, those who lived there!

"They were my father and mother," replied Harry, "it was me! We never wanted to abandon our old home!"

"Perhaps that would have been better for you!" the young girl murmured.

— And why, Nell? Wasn't it our stubborn refusal to leave her that led us to discover the new deposit? And didn't this discovery have happy consequences for an entire population that regained prosperity here

through work, for you, Nell, who, brought back to life, found hearts entirely yours!

"For me!" Nell replied quickly. "Yes! Whatever happens! As for the others... who knows?"

— What do you mean?

— Nothing... nothing!... But it was dangerous to venture into the new coal mine back then! Yes! Great danger! Harry! One day, some reckless people entered those depths. They went far, very far! They got lost...

"Lost?" said Harry, looking at Nell.

"Yes... lost..." replied Nell, her voice trembling. "Their lamp went out! They couldn't find their way back..."

"And there," cried Harry, "imprisoned for eight long days, Nell, they were close to death! And without a helping being, sent by God, perhaps an angel, who secretly brought them some food, without a mysterious guide who later led their liberators to them, they would never have left that grave!"

"And how do you know that?" asked the girl.

"Because those men were James Starr... they were my father... they were me, Nell!"

Nell, raising her head, took hold of the young man's hand, and she looked at him with such a fixed gaze that he felt troubled to the very depths of his heart.

"You!" repeated the girl.

"Yes!" replied Harry, after a moment of silence, "and it was you to whom we owe our lives."

"Nell! It could only be you!" Nell dropped her head into her hands, without replying. Harry had never seen her so deeply impressed.

"Those who saved you, Nell," he added, his voice trembling with emotion, "already owed you their lives, and do you think they could ever forget that?"

XVI

On the oscillating scale

However, the mining operations at New Aberfoyle were highly profitable. It goes without saying that the engineer James Starr and Simon Ford—the first discoverers of this rich Carboniferous basin—shared significantly in these profits. Harry was therefore becoming a catch. But he had little thought of leaving the cottage. He had taken over from his father as overman and kept a close eye on all the miners.

Jack Ryan was proud and delighted by all the wealth that was coming to his friend. He, too, was doing well in business. The two saw each other often, either at the cottage or working on projects in the back. Jack Ryan couldn't help but notice Harry's feelings for the young woman. Harry wouldn't admit it, but Jack would laugh heartily when his friend shook his head in denial.

It must be said that one of Jack Ryan's greatest desires was to accompany Nell on her first visit to the surface of the county. He wanted to see her wonder, her admiration for this nature still unknown to her. He certainly hoped that Harry would take her on this excursion. So far, however, Harry hadn't made the offer—which worried him somewhat.

One day, Jack Ryan was descending one of the ventilation shafts through which the lower levels of the coal mine communicated with the ground surface. He had taken one of those ladders which, by rising and lowering in successive oscillations, allow one to descend and ascend without fatigue. Twenty oscillations of the device had lowered him about one hundred and fifty feet when, on the narrow landing where he had taken his place, he met Harry, who was coming back up to the day's work.

"Is that you?" said Jack, looking at his companion, illuminated by the light from the electric lamps in the well.

"Yes, Jack," replied Harry, "and I'm glad to see you. I have a proposition for you..."

"I'm not listening to anything until you give me news of Nell!" exclaimed Jack Ryan.

— Nell is doing well, Jack, so well in fact that, in a month or six weeks, I hope...

— Will you marry her, Harry?

— You don't know what you're saying, Jack!

— It's possible, Harry, but I know what I'll do!

— And what will you do?

“I’ll marry her if you don’t!” Jack retorted, bursting into laughter. “Saint Mungo protects me! But I like her, sweet Nell! A young and good creature who’s never left the mine—she’s just the kind of woman a miner needs! She’s an orphan like I am, and if you really don’t think about her, and she’ll have your comrade, Harry!...”

Harry looked gravely at Jack. He let him talk, without even trying to answer him.

"What I'm saying doesn't make you jealous, Harry?" asked Jack Ryan, his tone becoming a little more serious.

"No, Jack," Harry replied calmly.

— However, if you don't make Nell your wife, you don't expect her to remain an old maid?

"I have no pretensions," replied Harry.

A wobble in the ladder then allowed the two friends to separate, one to descend, the other to climb back up the well. However, they did not separate.

"Harry," said Jack, "do you think I was speaking seriously to you earlier about Nell?"

"No, Jack," replied Harry.

— Well, I'll do it then!

— You, speak seriously!

"My good Harry," replied Jack, "I am capable of giving good advice to a friend."

— Give it, Jack.

"Well, there you have it! You love Nell with all the love she deserves, Harry! Your father, old Simon, and your mother, old Madge, love her too, as if she were their own child. And it would take very little effort for her to become truly their daughter!" "Why don't you marry her?"

"To make such a bold claim, Jack," replied Harry, "do you even know Nell's feelings?"

"No one is unaware of them, not even you, Harry, and that's why you're not jealous of me or anyone else." "But here's the ladder that's going down, and..."

— Wait, Jack, said Harry, holding back his friend, whose foot had already left the landing to rest on the movable step.

"Okay, Harry!" Jack cried, laughing, "you're going to have me quartered!"

"Listen seriously, Jack," replied Harry, "because I, in turn, am speaking seriously."

— I'll listen... until the next oscillation, but no more!

"Jack," Harry continued, "I have no reason to hide that I love Nell."

My greatest desire is to make her my wife...

— Good, that.

— But, as she still is, I have a kind of qualm about asking her to make a decision that must be irrevocable.

— What do you mean, Harry?

“I mean, Jack, Nell has probably never left those depths of the coal mine where she was born. She knows nothing, she knows nothing of the outside world. She has everything to learn through her eyes, and perhaps also through her heart. Who knows what her thoughts will be when new impressions are born within her! She has nothing earthly yet, and it seems to me that it would be deceiving her before she has decided, with full awareness, to prefer her life in the coal mine above all else.” “Do you understand me, Jack?”

— Yes... vaguely... I mostly understand that you're going to make me miss the next swing again!

"Jack," Harry replied in a deep voice, "when these devices should never work again, when this landing should be missing beneath our feet, you will listen to what I have to say!"

— Good for you, Harry. That's how I like to be spoken to! — So we're saying that before marrying Nell, you're going to send her to a boarding

school in Old Smoky?

"No, Jack," replied Harry, "I will be perfectly capable of educating the woman who will be my wife myself!"

— And that will only make it better, Harry!

"But first," Harry continued, "I want, as I just told you, for Nell to have a real understanding of the outside world. An analogy, Jack. If you loved a blind girl, and someone told you, 'She'll be cured in a month!' wouldn't you wait to marry her until she was cured?"

— Yes, indeed, yes! replied Jack Ryan.

"Well, Jack, Nell is still blind, and before I make her my wife, I want her to know perfectly well that it is me, that these are the conditions of my life that she prefers and accepts. I want her eyes to have finally been opened to the light of day!"

"Good, Harry, good, very good!" exclaimed Jack Ryan. "I understand you now. And when did the operation take place?"

“In a month, Jack,” Harry replied. “Nell’s eyes are gradually adjusting to the brightness of our discs. It’s a preparation. In a month, I hope, she will have seen the earth and its wonders, the sky and its splendors! She will know that nature has given human eyes horizons farther away than those of a dark coal mine! She will see that the limits of the universe are infinite!”

But, while Harry was thus carried away by his imagination, Jack Ryan, leaving the landing, had jumped onto the swaying step of the device.

"Hey! Jack," shouted Harry, "where are you?"

"Below you," replied the cheerful fellow, laughing. "While you rise into infinity, I descend into the abyss!"

"Goodbye, Jack!" replied Harry, clinging to the ascending ladder. "I advise you not to tell anyone what I've just said!"

"No one!" cried Jack Ryan, "but on one condition..."

- Which ?

— That's because I'll be accompanying you both on Nell's first excursion to the surface of the globe!

"Yes, Jack, I promise you," replied Harry.

A new pulse from the device created an even greater gap between the two friends. Their voices could now only reach each other in a very faint whisper.

And yet, Harry could still hear Jack shout:

"And when Nell has seen the stars, the moon and the sun, do you know which she will prefer?"

— No, Jack!

"It will be you, my friend, you again, you always!"

And Jack Ryan's voice finally faded away with a final hurrah!

However, Harry devoted all his free time to Nell's education. He had taught her to read and write—things in which the young girl made rapid progress. It was as if she "knew" by instinct. Never had a keener mind so quickly overcome such complete ignorance. It was a source of astonishment to those who came near her.

Simon and Madge felt increasingly connected to their adopted child, whose past, however, continued to worry them. They had recognized the nature of Harry's feelings for Nell, and this did not displease them.

We recall that during his first visit to the old cottage, the old overman had said to the engineer:

"Why should my son get married? What creature from up there would be suitable for a boy whose life is to be spent in the depths of a mine!"

Well, didn't it seem that Providence had sent him the only companion who could truly suit his son? Wasn't that like a favor from Heaven?

So the old overman promised himself that, if this marriage took place, on that day there would be a celebration in Coal-city that would be a landmark event for the miners of New Aberfoyle.

Simon Ford didn't know how right he was!

It must be added that yet another man desired this union of Nell and Harry no less ardently. This was the engineer James Starr. Certainly, he wanted the happiness of these two young people above all else. But a motive, perhaps of a more general interest, also drove him in this direction.

As we know, James Starr still harbored certain apprehensions, even though nothing in the present justified them any longer. However, what had been could be again. This mystery of the new coal mine was obviously only known to Nell. But if the future held new dangers for the miners of Aberfoyle, how could they guard against such eventualities without at least knowing the cause?

“Nell didn’t want to talk,” James Starr often repeated, “but what she has kept from everyone else until now, she won’t be able to keep from her husband for long! The danger would threaten Harry as it would threaten us. Therefore, a marriage that brings happiness to the spouses and security to their friends is a good marriage, or there will never be one like it!”

This was the reasoning, not without some logic, of the engineer James Starr. He even shared this reasoning with old Simon, who was not without appreciation. Nothing, therefore, seemed to stand in the way of Harry becoming Nell's husband.

And who could have doubted it? Harry and Nell loved each other. Their elderly parents couldn't have dreamed of another companion for their son. Harry's friends envied his happiness, while acknowledging that he deserved it. The young woman answered only to herself and needed no other consent than that of her own heart.

But if no one seemed able to stand in the way of this marriage, why, when the electric records fell silent at rest time, when night fell on the working-class town, when the inhabitants of Coal-city had returned to their cottages, why did a mysterious being slip out from one of the darkest corners of New Aberfoyle? What instinct guided this phantom through certain tunnels so narrow they seemed impassable? Why did this enigmatic being, whose eyes pierced the deepest darkness, come crawling to the shore of Lake Malcolm? Why did it head so stubbornly toward Simon Ford's house, and so cautiously, that it had thus far eluded all surveillance? Why did it press its ear to the windows and try to overhear snatches of conversation through the cottage shutters?

And when certain words reached him, why did his fist rise up to threaten the tranquil dwelling? Why, finally, did these words escape from his mouth, contorted by anger?

"Her and him! Never!"

XVII

A sunrise

One month later — it was the evening of August 20 — Simon Ford and Madge were bidding their best wishes to four tourists who were about to leave the cottage.

James Starr, Harry and Jack Ryan were going to lead Nell onto ground her foot had never trod, into this dazzling environment, whose light her eyes had not yet known.

The excursion was to last for two days. James Starr, in agreement with Harry, wanted that after these forty-eight hours spent outside, the young girl would have seen everything that she had not been able to see in the dark coal mine, that is to say the various aspects of the globe, as if a moving panorama of cities, plains, mountains, rivers, lakes, gulfs, seas, had unfolded before her eyes.

Now, in this part of Scotland, between Edinburgh and Glasgow, it seemed that nature had precisely wanted to bring together these earthly wonders, and, as for the heavens, they would be there as everywhere, with their changing clouds, their serene or veiled moon, their radiant sun, their swarming of stars.

The planned excursion had therefore been combined in such a way as to meet the conditions of this program.

Simon Ford and Madge would have been very happy to accompany Nell; but, as we know them, they did not willingly leave the cottage, and, in the end, they could not bring themselves to abandon, even for a day, their underground dwelling.

James Starr went there as an observer, as a philosopher, very curious, from a psychological point of view, to observe Nell's naive impressions, — perhaps even to catch a glimpse of the mysterious events in which her childhood had been involved.

Harry, for his part, wondered, not without apprehension, whether another young girl, other than the one he loved and had known until then, would reveal herself during this rapid initiation into the things of the outside world.

As for Jack Ryan, he was as happy as a lark taking flight in the first rays of sunshine. He fully expected his contagious cheerfulness to spread to his fellow travelers. It would be a way of paying his welcome.

Nell was pensive and seemed absorbed in thought.

James Starr had decided, not without reason, that the departure would take place in the evening. It was better, in fact, for the young girl to pass only through a gradual transition from the darkness of night to the light of day. And that was precisely the result that would be achieved, since, from midnight to noon, she would experience these successive phases of shadow and light, to which her eyes could gradually become accustomed.

As they were leaving the cottage, Nell took Harry's hand and said to him:

"Harry, is it really necessary for me to abandon our coal mine, even for just a few days?"

"Yes, Nell," replied the young man, "it must be done! It must be done for you and for me!"

“However, Harry,” Nell continued, “since you took me in, I’ve been as happy as can be. You’ve educated me. Isn’t that enough? What am I going to do up there?”

Harry looked at her without replying. The thoughts Nell was expressing were almost his own.

“My daughter,” James Starr said then, “I understand your hesitation, but it’s good that you come with us. Those you love will accompany you, and they’ll bring you back. Whether you wish to continue living in the coal mine afterward, like old Simon, like Madge, like Harry, that’s your prerogative! I have no doubt that it must be so, and I approve. But at least you’ll be able to compare what you’re leaving with what you’re taking, and act with complete freedom. So come!”

"Come, my dear Nell," said Harry.

"Harry, I'm ready to follow you," the girl replied.

At nine o'clock, the last train through the tunnel carried Nell and her companions to the surface of the county. Twenty minutes later, it dropped them off at the station where the small branch line, detached from the Dumbarton to Stirling railway, which served New Aberfoyle, connected.

The night was already dark. From the horizon to the zenith, a few wisps of vapor still drifted across the upper reaches of the sky, driven by a northwesterly breeze that cooled the air. The day had been beautiful. The night was sure to be too.

Upon arriving in Stirling, Nell and her companions abandoned the train and immediately left the station.

In front of them, between tall trees, a road unfolded which led to the banks of the Forth.

The first physical impression the young girl experienced was that of the pure air that her lungs eagerly inhaled.

"Breathe deeply, Nell," said James Starr, "breathe in this air filled with all the invigorating scents of the countryside!"

"What are those large plumes of smoke running above our heads?" asked Nell.

"Those are clouds," replied Harry, "they are half-condensed vapors that the wind is pushing westward."

— Ah! said Nell, how I would love to feel myself swept away in their silent whirlwind! — And what are those glittering points that shine through the tears in the clouds?

"These are the stars I told you about, Nell. So many suns, so many centers of worlds, perhaps similar to our own!" The constellations then appeared more clearly against the blue-black of the firmament, which the wind was gradually purifying.

Nell gazed at the thousands of bright stars that swarmed above her head.

"But," she said, "if they are suns, how can my eyes bear their brightness?"

“My daughter,” replied James Starr, “they are suns, indeed, but suns orbiting at an enormous distance. The nearest of these thousands of stars whose rays reach us is that star in Lyra, Wega, which you see there almost at its zenith, and it is still fifty trillion leagues away. Its brightness cannot therefore affect your gaze. But our sun will rise tomorrow only thirty-eight million leagues away, and no human eye can look upon it steadily, for it is hotter than a furnace. But come, Nell, come!”

They set off. James Starr held the girl by the hand. Harry walked beside her. Jack Ryan paced back and forth like a young dog, impatient with his masters' slowness.

The road was deserted. Nell gazed at the silhouettes of the tall trees, stirred by the wind in the shadows. She could easily have mistaken them for giants gesticulating. The rustling of the breeze in the high branches, the profound silence during the lulls, the horizon line becoming more distinct as the road crossed a plain—all of this filled her with new feelings and left indelible impressions. After asking questions at first, Nell fell silent, and her companions, by mutual agreement, respected her silence. They did not want to influence the young girl's sensitive imagination with their words. They preferred to let ideas arise of their own accord in her mind.

At about 11:30, the northern shore of the Gulf of Forth was reached.

There, a boat, which had been chartered by James Starr, was waiting. It was to carry him and his companions to the port of Edinburgh in a few hours.

Nell saw the brilliant water which rippled at her feet in the action of the surf and seemed to be studded with quivering stars.

"Is it a lake?" she asked.

“No,” Harry replied, “it’s a wide gulf with flowing water, it’s the mouth of a river, it’s almost an arm of the sea. Take a little of this water in the palm of your hand, Nell, and you’ll see it’s not as fresh as the water in Lake Malcolm.”

The young girl bent down, dipped her hand in the first waves and brought it to her lips.

"This water is salty," she said.

"Yes," replied Harry, "the sea has receded all the way here, because the tide is high. Three-quarters of our globe is covered with this salt water, of which you just drank a few drops!"

"But if the water in the rivers is only that of the sea poured down to them by the clouds, why is it sweet?" asked Nell.

"Because water becomes desalinated as it evaporates," replied James Starr. "Clouds are formed solely by evaporation and return this fresh water to the sea as rain."

"Harry, Harry!" cried the girl, "what is that reddish glow that sets the horizon ablaze? Is it a forest fire?"

And Nell pointed to a point in the sky, amidst the low mists that were taking on color in the east.

"No, Nell," replied Harry. "It's the moon rising."

— Yes, the moon! cried Jack Ryan, a superb silver platter that celestial genies circulate in the firmament, and which collects a whole currency of stars!

"Really, Jack!" replied the engineer, laughing, "I didn't know you had this penchant for bold comparisons!"

"Hey, Mr. Starr, my comparison is correct! You can see that the stars disappear as the moon moves forward. So I suppose they fall into it!"

"That is to say, Jack," replied the engineer, "that it is the moon which extinguishes the sixth magnitude stars with its brightness, and that is why they fade in its path."

"How beautiful it all is!" repeated Nell, who now lived only through her eyes. "But I thought the moon was perfectly round?"

"It's round when it's full," replied James Starr, "that is, when it's opposite the sun. But tonight, the moon is entering its last quarter, it's already waning, and our friend Jack's silver platter is nothing but a shaving dish!"

"Ah! Mr. Starr," cried Jack Ryan, "what an unworthy comparison! I was just about to sing that verse in honor of the moon!"

Star of the nights, come and caress me in your course
...

"No! It's impossible now! Your shaving dish has killed my inspiration!"

However, the moon was gradually rising above the horizon. Before it, the last vestiges of mist were dissipating. At the zenith and in the west, the stars still shone against a black background that the moonlight would gradually dim. Nell silently contemplated this magnificent spectacle; her eyes bore the soft, silvery glow without fatigue, but her hand trembled in Harry's and spoke for her.

"Let's embark, my friends," said James Starr. "We must have climbed the slopes of Arthur Seat before sunrise!" The boat was tied to a piling on the shore. A boatman was guarding it. Nell and her companions boarded. The sail was hoisted and filled with the northwest breeze.

What a new sensation the young girl felt then! She had sailed a few times on the lakes of New Aberfoyle, but the oar, however gently handled by Harry's hand, always betrayed the rower's effort. Here, for the first time, Nell felt herself being carried along with a glide almost as smooth as that of a balloon through the atmosphere. The gulf was as flat as a lake. Half-lying in the stern, Nell let herself be carried away by the rocking motion. At times, during certain lurches, a ray of moonlight filtered to the surface of the Forth, and the boat seemed to be gliding over a shimmering sheet of silver. Little ripples sang along the gunwale. It was enchanting.

But then it happened that Nell's eyes closed involuntarily. A sort of passing drowsiness overcame her. Her head rested on Harry's chest, and she fell into a peaceful sleep.

Harry wanted to wake her up, so that she wouldn't miss any of the magnificence of this beautiful night.

"Let her sleep, my boy," the engineer told him. "Two hours of rest will better prepare her to bear the day's impressions."

At two o'clock in the morning, the boat arrived at Granton Pier. Nell woke up as soon as she touched land.

"Did I sleep?" she asked.

“No, my daughter,” replied James Starr. “You simply dreamt that you were asleep, that’s all.”

The night was very clear then. The moon, halfway from the horizon to the zenith, scattered its rays to all points of the sky.

The small port of Granton held only two or three fishing boats, gently rocked by the swell of the gulf. The breeze calmed as morning approached. The atmosphere, cleared of mist, promised one of those delightful August days that the proximity of the sea makes even more beautiful. A kind of warm haze rose from the horizon, but so fine, so transparent, that the first rays of sunlight would absorb it in an instant. The young girl was thus able to observe this aspect of the sea, when it merges with the farthest reaches of the sky. The scope of her vision was thus extended, but her gaze did not experience that particular impression given by the Ocean, when the light seems to push its boundaries to infinity.

Harry took Nell's hand. They followed James Starr and Jack Ryan as they walked through the deserted streets. In Nell's mind, this suburb of the capital was nothing more than a collection of dark houses, reminiscent of Coal City, except that its skyline was higher and glittered with bright points of light. She walked with a light step, and Harry never had to slow his pace for fear of tiring her.

"Aren't you tired?" he asked her, after half an hour of walking.

"No," she replied. "My feet don't even seem to touch the ground! The sky is so high above us that I feel like flying away, as if I had wings!"

"Hold on to her!" cried Jack Ryan. "She's good to keep, our little Nell! I get that feeling too, when I've been stuck in the coal mine for a while!"

"That's because," said James Starr, "we no longer feel crushed by the shale vault that covers Coal-city! It seems as if the firmament is like a deep abyss into which one is tempted to plunge." "Isn't that how you feel, Nell?"

"Yes, Mr. Starr," replied the young girl, "that's right. I feel a sort of dizziness!"

"You'll get used to it, Nell," Harry replied. "You'll get used to the vastness of the outside world, and perhaps then you'll forget our grim coal mine!"

"Never, Harry!" replied Nell.

And she pressed her hand to her eyes, as if she wanted to recreate in her mind the memory of everything she had just left behind.

Between the sleeping houses of the town, James Starr and his companions crossed Leith-Walk. They skirted Calton Hill, where the

Observatory and Nelson's monument stood in the twilight. They followed Regent Street, crossed a bridge, and arrived by a slight detour at the end of Canongate.

There was still no movement in the city. Two o'clock struck on the Gothic clock tower of Canongate-Church.

At this spot, Nell stopped.

"What is this confused mass?" she asked, pointing to an isolated building that rose at the back of a small square.

“That mass, Nell,” replied James Starr, “is the palace of Scotland’s ancient rulers, Holyrood, where so many tragic events took place! There, the historian could conjure up many royal shadows, from the shadow of the unfortunate Mary Stuart to that of the old French King Charles X! And yet, despite these somber memories, when the day comes, Nell, you will not find this residence too gloomy! With its four great crenellated towers, Holyrood looks rather like some pleasure castle, whose feudal character has been preserved by the good pleasure of its owner!” “But let us continue our walk. There, within the very walls of the old Holyrood Abbey, rise those magnificent rocks of Salisbury, dominated by Arthur’s Seat. It is there that we shall ascend.” It is from its summit, Nell, that your eyes will see the sun appear above the sea horizon.

They entered the King's Park. Then, gradually ascending, they crossed Victoria Drive, a magnificent circular road, passable by cars, which Walter Scott congratulated himself on having obtained with a few lines of novel.

Arthur Seat is, in truth, only a hill seven hundred and fifty feet high, whose isolated summit dominates the surrounding heights. In less than half an hour, by a winding path that made the ascent easy, James Starr and his companions reached the skull of this lion which Arthur Seat resembles when viewed from the west.

There, all four sat down, and James Starr, always full of quotations borrowed from the great Scottish novelist, simply said:

"Here is what Walter Scott wrote, on cell number eight of *Edinburgh Prison* :

"If I had to choose a place from which to best see the sunrise and sunset, it would be this very spot."

"Just wait, Nell. The sun will soon appear, and for the first time, you'll be able to see it in all its splendor."

The girl's gaze was now turned eastward. Harry, standing near her, watched her anxiously. Wouldn't she be too easily overwhelmed by the first rays of dawn? Everyone remained silent. Jack Ryan himself fell silent.

Already a faint, pale line, tinged with pink, was appearing above the horizon against a backdrop of light mist. A remnant of vapors, lost at the zenith, was struck by the first ray of light. At the foot of Arthur's Seat, in the absolute stillness of the night, Edinburgh, still slumbering, appeared indistinctly. A few points of light pierced the darkness here and there. These were the morning stars lit by the people of the Old Town. Behind, to the west, the horizon, broken by whimsical silhouettes, bordered a rugged region of peaks, to which each ray of sunlight would add a plume of fire.

However, the sea's perimeter was more sharply defined towards the east. The range of colors gradually arranged themselves according to the order of the solar spectrum. The red of the first mists gradually faded to the violet of the zenith. Second by second, the palette grew more intense: pink became red, red became fire. Day broke at the point of intersection that the sun's arc would fix on the sea's circumference.

At that moment, Nell's gaze traveled from the foot of the hill to the city, whose districts were beginning to emerge in clusters. Tall monuments and a few pointed steeples rose here and there, their outlines now appearing more clearly. A kind of ashen light spread through the air. Finally, the first ray reached the young girl's eye. It was that green ray that, evening or morning, rises from the sea when the horizon is clear.

Half a minute later, Nell straightened up and reached out towards a point overlooking the districts of the new town.

"A fire!" she said.

“No, Nell,” Harry replied, “it’s not a fire. It’s a touch of gold that the sun places on top of Walter Scott’s monument!”

And indeed, the very tip of the bell tower, two hundred feet high, shone like a first-rate lighthouse.

The day had come. The sun burst forth. Its disk still seemed damp, as if it had truly emerged from the waters of the sea. Initially widened by refraction, it gradually narrowed, taking on a circular shape. Its

brilliance, soon unbearable, was like that of a furnace's mouth piercing the sky.

Nell had to close her eyes almost immediately. On their eyelids, which were too thin, she even had to press her fingers tightly together.

Harry wanted her to turn towards the opposite horizon.

"No, Harry," she said. "My eyes need to get used to seeing what your eyes can see!"

Through the palms of her hands, Nell could still see a pink glow, which whitened as the sun rose above the horizon. Her gaze gradually adjusted to it. Then, her eyelids lifted, and her eyes finally absorbed the daylight.

The pious child fell to her knees, crying out:

"My God, how beautiful your world is!"

The young girl then lowered her gaze and looked down. At her feet unfolded the panorama of Edinburgh: the new, neatly aligned districts of the New Town, the chaotic jumble of houses, and the bizarre network of streets in Auld Recky. Two hills dominated this scene: the castle clinging to its basalt rock and Calton Hill, bearing on its rounded summit the modern ruins of a Greek monument. Magnificent tree-lined roads radiated from the capital to the countryside. To the north, an arm of the sea, the Gulf of Forth, cut deeply into the coast, onto which lay the port of Leith. Above, in the background, stretched the harmonious coastline of County Fife. A road, as straight as the one to Piraeus, connected this Athens of the North to the sea. To the west lay the beautiful beaches of Newhaven and Portobello, whose sand tinged the first waves of the surf yellow. Offshore, a few rowboats enlivened the waters of the gulf, and two or three steamers plumed black smoke into the sky. Beyond, the vast countryside stretched out to a verdant expanse. Modest hills dotted the plain here and there. To the north, the Lomond Hills, and to the west, Ben Lomond and Ben Ledi reflected the sun's rays as if eternal ice had blanketed their peaks.

Nell couldn't speak. Her lips only murmured vague words. Her arms trembled. Her head was spinning. For a moment, her strength left her. In that pure air, before that sublime sight, she suddenly felt herself weaken and fell unconscious into Harry's arms, ready to receive her.

This young girl, whose life had thus far unfolded in the bowels of the earth, had finally contemplated what constitutes almost the entire

universe, as the Creator and man made it. Her gaze, after having hovered over the city and the countryside, had just extended, for the first time, over the immensity of the sea and the infinity of the sky.

XVIII

From Lake Lomond to Lake Katrine

Harry, carrying Nell in his arms, followed by James Starr and Jack Ryan, descended the slopes of Arthur-Seat. After a few hours of rest and a comforting lunch at Lambret's Hotel, they considered extending the excursion with a drive through the lake country.

Nell had regained her strength. Her eyes could now open wide to the light, and her lungs could breathe in the invigorating and healthy air. The green of the trees, the varied hues of the plants, the azure of the sky, had unfolded the full spectrum of colors before her eyes.

The train they took from General Railway Station brought Nell and her companions to Glasgow. There, from the last bridge spanning the Clyde, they could admire the river's curious maritime movement. Then, they spent the night at Comrie's Royal Hotel.

The following day, from the Edinburgh and Glasgow railway station, the train was to take them quickly, via Dumbarton and Balloch, to the southern end of Lake Lomond.

"That's the land of Rob Roy and Fergus MacGregor!" cried James Starr, "the territory so poetically celebrated by Walter Scott!" "You don't know that country, Jack?"

"I know him from his songs, Mr. Starr," replied Jack Ryan, "and when a country has been sung about so well, it must be superb!"

"It is indeed," exclaimed the engineer, "and our dear Nell will cherish the fondest memories of it!"

"With a guide like yourself, Mr. Starr," replied Harry, "it will be doubly beneficial, for you will tell us the history of the country while we look at it."

"Yes, Harry," said the engineer, "as far as my memory allows, but on one condition: that cheerful Jack will help me! When I get tired of telling the story, he'll sing!"

"You won't have to tell me twice," replied Jack Ryan, launching into a vibrant note, as if he wanted to raise his throat to *the A* of the tuning fork.

By the railway from Glasgow to Balloch, between the commercial metropolis of Scotland and the southern end of Lake Lomond, there are only about twenty miles.

The train passed through Dumbarton, a royal borough and county seat, whose castle, still fortified in accordance with the Treaty of Union, is picturesquely perched on the two peaks of a large basalt rock.

Dumbarton is situated at the confluence of the Clyde and the Leven. In this regard, James Starr recounted some details of the adventurous story of Mary Stuart. Indeed, it was from this town that she set sail to marry Francis II and become Queen of France. There, too, after 1815, the British government considered interning Napoleon; but the choice of Saint Helena prevailed, and that is why England's prisoner went to die on an Atlantic rock, much to the benefit of legendary memory.

Soon, the train stopped at Balloch, near a wooden jetty that led down to the level of the lake.

A steamboat, the *Sinclair* , was waiting for tourists taking the lake excursion. Nell and her companions boarded it after purchasing their tickets to Inversnaid, at the northern end of Lake Lomond.

The day began with bright sunshine, clear of the British mists that usually shroud it. No detail of the landscape, which would unfold over a thirty-mile stretch, was to escape the passengers of the *Sinclair* . Nell, seated in the stern between James Starr and Harry, absorbed with all her senses the magnificent poetry that so richly imbues this beautiful Scottish countryside.

Jack Ryan paced back and forth on the deck of the *Sinclair* , constantly questioning the engineer, who, however, didn't need to be questioned. As Rob Roy's country unfolded before his eyes, he described it with enthusiastic admiration.

In the first waters of Lake Lomond, many small islands or islets first appeared. It was like a scattering. The *Sinclair* lay alongside their steep shores, and, in the spaces between the islands, there were sometimes a solitary valley, sometimes a wild gorge, bristling with abrupt rocks.

“Nell,” said James Starr, “each of these islets has its legend, and perhaps its song, as well as the mountains that frame the lake. One can say,

without too much pretension, that the history of this land is written with these gigantic characters of islands and mountains."

"Do you know, Mr. Starr," said Harry, "what this part of Lake Lomond reminds me of?"

— What does she remind you of, Harry?

— The thousand islands of Lake Ontario, so admirably described by Cooper. You must be as struck by this resemblance as I am, my dear Nell, because, a few days ago, I read you this novel which has rightly been called the masterpiece of the American author.

"Indeed, Harry," replied the girl, "it's the same appearance, and the *Sinclair* slips between these islands, just as Jasper Freshwater's cutter did in Lake Ontario!"

"Well," the engineer continued, "that proves both sites deserved to be celebrated by two poets! I don't know those thousand islands of Ontario, Harry, but I doubt their appearance is any more varied than that of this Lomond archipelago. Look at this landscape! There's Murray Island, with its old Fort Lennox, where the old Duchess of Albany resided after the death of her father, her husband, and her two sons, beheaded by order of James I. There's Clar Island, Cro Island, Torr Island—some rocky, wild, devoid of any vegetation, others showing their green, rounded peaks. Here, larches and birches. There, fields of withered, yellow heather. Truly! I find it hard to believe that the thousand islands of Lake Ontario offer such a variety of scenery!"

"What is this little port?" asked Nell, who had turned back towards the eastern shore of the lake.

"That's Balmaha, which forms the gateway to the Highlands," replied James Starr. "There begin our Scottish highlands. The ruins you see, Nell, are those of an old convent for women, and those scattered tombs contain various members of the MacGregor family, whose name is still famous throughout the region."

"Famous for the blood that this family has shed and caused to be shed!" Harry observed.

"You're right," replied James Starr, "and it must be admitted that the fame gained from battles is still the most resounding. These tales of combat have resonated far through the ages…"

"And they live on through songs," added Jack Ryan.

And, to support his claim, the brave boy sang the first verse of an old war song, which recounted the exploits of Alexander MacGregor, of Glen Sraë, against Sir Humphry Colquhour, of Luss.

Nell listened, but from these accounts of battles, she received only a sad impression. Why so much blood spilled on these plains, which the young girl found immense, where, however, there should have been no shortage of space for anyone?

The shores of the lake, which measure three to four miles, tended to draw closer near the small port of Luss. Nell caught a glimpse of the old tower of the former castle. Then the *Sinclair* turned north again, and Ben Lomond, rising nearly three thousand feet above the lake, came into view for the tourists.

"The magnificent mountain!" exclaimed Nell, "and from its summit, what a beautiful view it must be!"

“Yes, Nell,” replied James Starr. “Look how proudly that peak rises from the basket of oaks, birches, and larches that carpet the lower slopes of the mountain! From here, you can see two-thirds of our old Caledonia. It was here that MacGregor’s clan made their usual residence, on the eastern side of the lake. Not far away, the quarrels of the Jacobites and the Hanoverians more than once stained these desolate gorges with blood. There, on fine nights, rises that pale moon which old tales call ‘MacFarlane’s lantern.’ There, the echoes still repeat the imperishable names of Rob Roy and MacGregor Campbell!”

Ben Lomond, the last peak of the Grampians range, truly deserves to have been celebrated by the great Scottish novelist. As James Starr observed, there are higher mountains, whose summits are capped with eternal snow, but perhaps none is more poetic anywhere in the world.

"And," he added, "when I think that this Ben Lomond belongs entirely to the Duke of Montrose! His Grace owns a mountain like a London burgher owns a bowling green in his garden."

Meanwhile, the *Sinclair* arrived at the village of Tarbet, on the opposite shore of the lake, where it dropped off the travelers bound for Inverary. From this vantage point, Ben Lomond appeared in all its splendor. Its flanks, streaked by the streambeds, shimmered like sheets of molten silver.

As the *Sinclair* flowed along the base of the mountain, the country became increasingly steep. There were only a few isolated trees here

and there, among them some of those willows whose branches were once used to hang people of low status.

"To save hemp," James Starr observed.

The lake, however, narrowed as it stretched northward. The lateral mountains enclosed it more closely. The steamer skirted a few more islands and islets, Inveruglas, Eilad Whou, where the remains of a fortress belonging to the MacFarlane family stood. Finally, the two shores met, and the *Sinclair* docked at the Inverslaid station.

While their lunch was being prepared, Nell and her companions went to visit a torrent near the landing site that plunged quite high into the lake. It seemed to have been placed there as a stage set, for the pleasure of tourists. A rickety bridge leaped over the churning waters amidst a spray of liquid. From this vantage point, the view encompassed a large part of Lake Lomond, and Lake *Sinclair* appeared as nothing more than a speck on its surface.

Lunch finished, it was time to go to Lake Katrine. Several cars, bearing the arms of the Breadalbane family — the family that once supplied wood and water to the fugitive Rob Roy — were at the disposal of the travelers and offered them all the comfort that distinguishes English coachbuilding.

Harry placed Nell on the upper deck, in accordance with the fashion of the day. He and his companions took their places beside her. A magnificent coachman, in red livery, gathered the reins of his four horses in his left hand, and the team began to climb the mountainside, following the winding bed of the stream.

The road was very steep. As it climbed, the shape of the surrounding peaks seemed to change. The entire range on the opposite shore of the lake and the peaks of Arroquhar, overlooking the Inveruglas valley, could be seen rising magnificently. To the left, Ben Lomond emerged, revealing the abrupt escarpment of its northern flank.

The land between Lake Lomond and Lake Katrine had a wild aspect. The valley began with narrow gorges that led to Aberfoyle Glen. This name painfully reminded the young girl of those terrifying abysses in which her childhood had unfolded. So James Starr hastened to distract her with his stories.

The landscape, moreover, lent itself to such a setting. It was on the shores of the small Lake Ard that the principal events of Rob Roy's life unfolded. There stood grim-looking limestone rocks, interspersed with

pebbles, hardened like cement by the effects of time and the elements. Miserable huts, resembling dens—the kind called "bourrochs"—lay amidst the ruined sheepfolds. One could not tell whether they were inhabited by humans or wild beasts. A few children, their hair already bleached by the harsh climate, watched the passing carriages with wide, astonished eyes.

“This,” said James Starr, “is what one might most certainly call the land of Rob Roy. It was here that the excellent bailiff Nichol Jarvie, worthy son of his father the deacon, was seized by the militia of the Earl of Lennox. It was on this very spot that he was left hanging by the seat of his breeches, fortunately made of good Scottish cloth, and not of those flimsy rags from France! Not far from the sources of the Forth, fed by the torrents of the Ben Lomond, one can still see the ford that the hero crossed to escape the soldiers of the Duke of Montrose. Ah! If he had known the dark recesses of our coalfield, he could have defied all searches there! You see, my friends, one cannot take a step in this land, marvelous in so many ways, without encountering those memories of the past that inspired Walter Scott when he paraphrased, in magnificent stanzas, the call to arms of the MacGregor clan!”

"That's all well and good, Mr. Starr," replied Jack Ryan, "but if it's true that Nichol Jarvie remained suspended by the seat of his trousers, what becomes of our proverb: 'He who can ever take a Scotsman's trousers is a clever one indeed?'"

"Well, Jack, you're right," replied James Starr laughing, "and that simply proves that, on that day, our bailiff wasn't dressed in the fashion of his ancestors!"

— He was wrong, Mr. Starr!

"I don't disagree, Jack!"

The team of horses, after climbing the steep banks of the torrent, descended into a valley devoid of trees and water, covered only with sparse heather. In some places, a few piles of stones rose up in pyramids.

“These are cairns,” said James Starr. “In the past, every passerby had to bring a stone to honor the hero lying beneath these tombs. From this came the Gaelic saying: ‘Woe to him who passes by a cairn without leaving a stone of last rites!’ If the sons had kept the faith of their fathers, these piles of stones would now be hills. Truly, in this region, everything contributes to developing this innate, natural poetry in the hearts of the mountain people! This is true of all mountainous

countries. The imagination is overexcited by these wonders, and if the Greeks had lived in a land of plains, they would never have invented ancient mythology!"

During these and many other speeches, the car plunged into the narrow gorges of a valley, which would have been very suitable for the frolicking of the brawnies familiar to the great Meg Merillies. The small lake of Arklet was left on the left, and a steep road appeared, leading to the Stronachlacar inn on the shore of Lake Katrine.

There, at the head of a small jetty, was bobbing a small steam-boat, which naturally bore the name *Rob-Roy* . The travelers embarked immediately: it was about to depart.

Lake Katrine is only ten miles long, and never more than two miles wide. The first hills of the shoreline still bear a strong character.

"So this is the lake," exclaimed James Starr, "that has been rightly compared to a long eel! They say it never freezes. I don't know about that, but what must not be forgotten is that it served as the setting for the exploits of the *Lady of the Lake* . I am certain that, if our friend Jack were to look closely, he would still see the light shadow of the beautiful Helen Douglas gliding across its surface!"

"Certainly, Mr. Starr," replied Jack Ryan, "and why shouldn't I see her? Why shouldn't that lovely woman be as visible on the waters of Lake Katrine as the coal mine goblins are on the waters of Lake Malcolm?"

At that moment, the clear sounds of a bagpipe could be heard from the rear of the *Rob-Roy* .

There, a Highlander in national costume was playing a prelude on his three-drone bagpipe, the largest *drone sounding G* , the second *B , and the smallest the octave of the largest. As for the chanter, pierced with eight holes, it produced a G* major scale, of which *F* was a natural note.

The Highlander's refrain was a simple, sweet, and naive song. One might truly believe that these national melodies were composed by no one, that they are a natural blend of the whisper of the breeze, the murmur of the waters, and the rustling of leaves. The form of the refrain, which returned at regular intervals, was unusual. Its phrase consisted of three bars in duple meter and one bar in triple meter, ending on the weak beat. Unlike the songs of old, it was in a major key, and it could have been written as follows, in that coded language which gives not the notes, but the intervals of the tones:

5 | 1.2 | 3525 | 1.765 | 22.22
…

1.2 | 3525 | 1.765 | 11.11 …

A truly happy man then was Jack Ryan. He knew this song of the Scottish lochs. So, while the Highlander accompanied him on his bagpipes, he sang in his resonant voice a hymn dedicated to the poetic legends of old Caledonia:

Beautiful lakes with still waters,
Keep forever Your charming legends, Beautiful Scottish lakes! On your shores one finds the trace Of those much-missed heroes, Those descendants of noble race,
Whom our Walter sang of!
Here is the tower where the witches Prepared their frugal meal; There, the vast fields of heather, Where the shade of Fingal returns. Here pass in the dark night The wild dances of the goblins. There, sinister, appears in the shadows The face of the old Puritans! And among the wild rocks, In the evening, one can still catch Waverley, who, towards your shores, Leads Flora Mac Ivor! The Lady of the Lake surely comes To wander there on her palfrey, And Diana, not far away, listens To the sound of Rob Roy's horn! Did we not once hear Fergus amidst his clans, intoning his war pibrochs, awakening the echo of the Highlands? So far from you, poetic lakes, that fate guides our steps, ravines, rocks, ancient caves, our eyes will not forget you! O vision too soon ended, can you not return to us? To you, old Caledonia, to you, all our memory! Beautiful lakes with sleeping waters, keep forever your charming legends, beautiful Scottish lakes!

It was three o'clock in the evening. The western shores of Lake Katrine, less rugged, stood out against the double frame of the Ben An and the Ben Venue. Already, half a mile away, the narrow basin was taking shape, at the bottom of which the *Rob-Roy* would disembark the travelers, who were going to Stirling via Callander.

Nell was as if exhausted by the constant strain on her mind. Only one word escaped her lips: "My God! My God!" each time a new object of wonder presented itself to her sight. She needed a few hours of rest, if only to fix the memory of so many marvels more permanently.

At that moment, Harry took her hand again. He looked at the girl with emotion and said to her:

"Nell, my dear Nell, soon we will be back in our dark domain! Will you not regret anything you have seen during these few hours spent in the full light of day?"

"No, Harry," replied the girl. "I will remember, but I will happily return with you to our beloved coal mine."

"Nell," Harry asked, his voice trembling with emotion, "do you want a sacred bond to unite us forever before God and men? Do you want me for your husband?"

"I do, Harry," replied Nell, looking at him with her pure eyes, "I do, if you think I can be enough for your life..." Nell had not finished this sentence, in which Harry's entire future was summed up, when an inexplicable phenomenon occurred.

The *Rob-Roy* , although still half a mile from the shore, experienced a sudden shock. Its keel had just struck the bottom of the lake, and its engine, despite all its efforts, could not pull it free.

This accident occurred because, in its eastern section, Lake Katrine had just emptied almost suddenly, as if a huge fissure had opened beneath its bed. In a matter of seconds, it had dried up, like a shoreline at the lowest point of a spring tide. Almost all of its contents had seeped through the earth's depths.

"My friends," James Starr had exclaimed, as if the cause of the phenomenon had suddenly been revealed to him, "God save New Aberfoyle!"

XIX

A final threat

That day, in New Aberfoyle, work proceeded steadily. In the distance, the crack of dynamite cartridges could be heard, blasting through the coal seam. Here, picks and tongs brought the coal down ; there, the screech of drills, their blades piercing the fissures in sandstone or shale. Long, cavernous sounds filled the air. Air drawn in by the machines rushed through the ventilation shafts. The wooden doors slammed shut under the violent blasts. In the lower tunnels, the mechanically powered trains of mine cars sped by at fifteen miles per hour, and automatic bells warned the workers to huddle in the shelters. The cages

rose and fell relentlessly, pulled by the enormous drums of the engines mounted on the surface. The records, pushed to their full power, brightly illuminated Coal-city.

The mining operation was therefore carried out with the utmost energy. The ore flowed into the mine carts, which by the hundreds were emptied into the skips at the bottom of the extraction shafts. While some of the miners rested after the night shift, the day crews worked without wasting an hour.

Simon Ford and Madge, having finished their dinner, had settled down in the cottage courtyard. The old overman was taking his usual nap, smoking his pipe filled with excellent French tobacco. When the couple talked, it was about Nell, their son, James Starr, and this excursion to the surface of the earth. Where were they? What were they doing at the moment? How could they stay out so long without feeling homesick for the coal mine?

At that moment, a roar of extraordinary violence was suddenly heard. It was as if a huge waterfall was rushing into the coal mine.

Simon Ford and Madge had stood up abruptly.

Almost immediately the waters of Lake Malcolm swelled. A high wave, breaking like a tidal bore, invaded the shore and crashed against the wall of the cottage.

Simon Ford, grabbing Madge, had quickly dragged her to the first floor of the house.

At the same time, cries rose from all sides in Coalcity, threatened by this sudden flood. Its inhabitants sought refuge even on the high schist rocks that formed the lake's shoreline.

Terror was at its peak. Already, some miners' families, half-panicked, were rushing towards the tunnel to reach the upper levels. There was a real fear that the sea might have burst into the coal mine, whose galleries extended as far as the North Canal. The crypt, however vast, would have been completely flooded. Not one of the inhabitants of New Aberfoyle would have escaped death.

But, just as the first escapees reached the tunnel opening, they found themselves face to face with Simon Ford, who had immediately left the cottage.

"Stop, stop, my friends!" the old overman shouted to them. "If our city were to be invaded, the flood would run faster than you, and no one would escape it! But the waters are no longer rising! All danger seems to have passed."

"And what about our companions who are busy working underground?" exclaimed some of the miners.

“They have nothing to fear,” replied Simon Ford. “The mining operation is located one level above the lakebed!”

Events proved the old overman right. The flooding had occurred suddenly; but, spread across the lower levels of the vast coal mine, it had no other effect than to raise the level of Lake Malcolm by a few feet. Coal-city was therefore not compromised, and it could be hoped that the floodwaters, carried to the lowest, still unexploited depths of the mine, would have caused no casualties.

As for the flooding, whether it was caused by an internal aquifer seeping through fissures in the mine's structure, or whether some underground stream had rushed down its collapsed bed to the upper levels of the mine, Simon Ford and his companions couldn't say. But no one doubted that it was simply an accident, such as sometimes occurs in coal mines.

But that very evening, they knew what to expect. The county newspapers published accounts of this strange phenomenon, which had unfolded at Lake Katrine. Nell, Harry, James Starr, and Jack Ryan, who had rushed back to the cottage, confirmed the news and learned, not without great relief, that it had all been limited to property damage in New Aberfoyle.

So, the bed of Lake Katrine had suddenly collapsed. Its waters had burst through a wide fissure right into the coal mine. The Scottish novelist's favorite lake was now nothing left to wet the Lady of the Lake's pretty feet—at least not in its southern part. It was reduced to a pond of a few acres where its bed lay below the collapsed section.

What a sensation this bizarre event caused! It was undoubtedly the first time a lake had emptied itself in a matter of moments into the bowels of the earth. Now, there was nothing left to do but erase it from the maps of the United Kingdom until it had been refilled—by public subscription—after the fissure had first been plugged. Walter Scott would have died of despair—had he still been alive!

After all, the accident was explainable. Indeed, between the deep cavity and the lakebed, the secondary rock layer was reduced to a thin layer, due to a particular geological arrangement of the massif.

But while the landslide appeared to be due to a natural cause, James Starr, Simon, and Harry Ford wondered if it might be the work of some kind of deliberate act. Their suspicions had returned with renewed force. Was the malevolent force about to resume its attacks against the operators of the rich coal mine?

A few days later, James Starr was discussing it at the cottage with the old overman and his son.

"Simon," he said, "in my opinion, although the fact can be explained by itself, I have a feeling that it falls into the category of those whose cause we are still seeking!"

"I think as you do, Mr. James," replied Simon Ford; "but, if you take my advice, let's not spread the word and conduct our own investigation."

"Oh!" exclaimed the engineer, "I know the result in advance!"

— Hey! What will it be?

We will find the evidence of wrongdoing, but not the perpetrator!

“But he does exist!” replied Simon Ford. “Where is he hiding? Could a single being, however perverse, carry out such a diabolical idea as causing a lake to collapse? Truly, I’m beginning to believe, like Jack Ryan, that it’s some mining genius who’s got it in for us invading his domain!”

It goes without saying that Nell was kept out of these discussions as much as possible. This, moreover, contributed to the desire to keep her completely unaware of them. Her demeanor, however, showed that she shared her adoptive family's concerns. Her sad face bore the mark of the inner turmoil that tormented her.

In any case, it was decided that James Starr, Simon, and Harry Ford would return to the site of the landslide and try to determine its causes. They told no one about their plan. To anyone unaware of the full context of their argument, the opinion of James Starr and his friends would have seemed utterly unacceptable.

A few days later, the three of them, boarding a light canoe that Harry was maneuvering, came to examine the natural pillars that supported

the part of the massif in which the bed of Lake Katrine was carved.

This examination proved them right. The pillars had been attacked with mines. The blackened traces were still visible, because the waters had receded due to seepage, and one could reach the base of the substructure.

This collapse of a portion of the dome's vaults had been premeditated, then carried out by human hands.

"There can be no doubt," said James Starr. "And who knows what would have happened if, instead of this small lake, the collapse had opened a passage to the waters of a sea!"

"Yes!" cried the old overman with a feeling of pride, "it would have taken no less than a sea to drown our Aberfoyle! But, again, what interest can anyone possibly have in the ruin of our business?"

“It’s incomprehensible,” replied James Starr. “This isn’t some band of common criminals who, from their lair, would spread out across the land to steal and plunder! Such misdeeds over the past three years would have revealed their existence! Nor is it, as I’ve sometimes thought, a matter of smugglers or counterfeiters, hiding their wicked trade in some unknown corner of these immense caverns, and therefore intent on driving us out. One doesn’t make counterfeit or smuggle money to keep it! It’s clear, however, that a relentless enemy has sworn the destruction of New Aberfoyle, and that self-interest compels him to seek every possible means to satisfy the hatred he has sworn against us!” Too weak, no doubt, to act openly, he prepares his traps in the shadows, but the intelligence he displays there makes him a formidable being. My friends, he possesses all the secrets of our domain better than we do, since he has eluded all our investigations for so long! He is a man of the trade, a skilled man among the skilled, without a doubt, Simon. What we have discovered of his methods is clear proof of this. Now then! Have you ever had a personal enemy on whom your suspicions could fall? Look closely. There are monomaniacal hatreds that time cannot extinguish. Go back to the earliest moments of your life, if necessary. Everything that is happening is the work of a kind of cold and patient madness, which requires you to recall even your most distant memories on this matter!

Simon Ford didn't reply. It was clear that the honest overman, before offering an explanation, was candidly questioning his entire past. Finally, raising his head:

"No," he said, "before God, neither Madge nor I have ever harmed anyone. We don't believe we could have an enemy, not even one!"

"Ah!" cried the engineer, "if Nell would finally speak!"

“Mr. Starr, and you, Father,” Harry replied, “I beg you, let us keep our investigation a secret for now! Don’t question my poor Nell! I can already sense her anxiety and distress. I’m certain that her heart is barely containing a secret that’s suffocating her. If she remains silent, it’s either because she has nothing to say, or because she doesn’t feel she should speak! We can’t doubt her affection for us, for all of us! Later, if she tells me what she’s kept from us until now, you’ll be informed immediately.”

"Very well, Harry," replied the engineer, "and yet this silence, if Nell knows anything, is truly inexplicable!"

And as Harry was about to protest:

"Don't worry," added the engineer. "We won't say anything to the woman who is to be your wife."

— And who would be without further delay, if you wished, my father!

"My boy," said Simon Ford, "in exactly one month, your wedding will take place." "You will be a father figure to Nell, Mr. James?"

"Count on me, Simon," replied the engineer.

James Starr and his two companions returned to the cottage. They said nothing about the results of their exploration, and, for everyone at the coal mine, the collapse of the vaults remained a mere accident. There was only one less lake in Scotland.

Nell had gradually resumed her usual activities. From her visit to the surface of the county, she had retained indelible memories that Harry used for his instruction. But this initiation into life outside had left her with no regrets. She loved, as before this exploration, the dark domain where, as a woman, she would continue to dwell, after having lived there as a child and young woman.

However, the upcoming marriage of Harry Ford and Nell had caused quite a stir in New Aberfoyle. Congratulations poured into the cottage. Jack Ryan was among those who offered theirs. He was also often seen studying his best songs in the distance for a party that the entire population of Coal-city was to attend.

But it so happened that, during the month preceding the wedding, New Aberfoyle suffered more than it had ever before. It seemed as if the approach of Nell and Harry's union brought about one disaster after another. The accidents occurred mainly in the underground workings, without the true cause being discovered.

Thus, a fire devoured the timbering of a lower gallery, and the lamp used by the arsonist was found. Harry and his companions had to risk their lives to stop this fire, which threatened to destroy the mine, and they only succeeded by using the fire extinguishers, filled with water containing carbonic acid, with which the coal mine was prudently supplied.

On another occasion, it was a collapse caused by the failure of the well supports, and James Starr discovered that these supports had been previously cut with a saw. Harry, who was supervising the work at that point, was buried under the rubble and only miraculously escaped death.

A few days later, on the mechanically pulled tramway, the train of wagons Harry had ridden on struck an obstacle and overturned. It was later discovered that a beam had been placed across the track.

In short, these incidents multiplied to such an extent that a kind of panic broke out among the miners. Nothing less than the presence of their foremen was needed to keep them on the job.

"But they're a whole gang, these criminals!" Simon Ford kept repeating, "and we can't get our hands on a single one!"

The search resumed. The county police stood by day and night, but they could find nothing. James Starr forbade Harry, whom this malicious intent seemed to target most directly, from ever venturing alone outside the center of the construction site.

The same treatment was given to Nell, from whom, at Harry's insistence, all these criminal attempts were nevertheless kept secret, as they might remind her of the past. Simon Ford and Madge watched over her day and night with a kind of severity, or rather, fierce solicitude. The poor child was aware of this, but not a remark, not a complaint escaped her. Did she tell herself that if they acted this way, it was for her own good? Yes, probably. However, she too, in her own way, seemed to watch over others, and only appeared calm when all those she loved were gathered at the cottage. In the evening, when Harry came home, she couldn't suppress a surge of wild joy, quite unlike her usual reserved rather than outgoing nature. Once the night was over, she was up before

everyone else. Her anxiety returned first thing in the morning, at the time when everyone went out to work in the cellar.

Harry wished, to give her peace of mind, that their marriage were a fait accompli. It seemed to him that, faced with this irrevocable act, ill will, rendered useless, would be disarmed, and that Nell would only feel secure once she was his wife. This impatience was shared by James Starr, Simon Ford, and Madge alike. Everyone was counting down the days.

The truth is that everyone was gripped by the most sinister premonitions. This hidden enemy, whom they didn't know where to find or how to fight, led them to whisper that nothing concerning Nell was likely indifferent to him. This solemn act of Harry's marriage to the young woman could therefore be the occasion for some new machination fueled by his hatred.

One morning, eight days before the agreed time for the ceremony, Nell, driven no doubt by some sinister premonition, had managed to be the first to leave the cottage, whose surroundings she wanted to observe.

Upon reaching the threshold, a cry of unspeakable anguish escaped her mouth.

This cry echoed throughout the house, and in an instant drew Madge, Simon and Harry to the girl's side.

Nell was as pale as death, her face contorted, her features marked by unspeakable terror. Unable to speak, her gaze was fixed on the cottage door, which she had just opened. Her clenched hand pointed to the lines, which had been drawn during the night and whose sight terrified her:

"Simon Ford, you've stolen the last vein of our old coal mines! Harry, your son, has stolen Nell from me! Woe to you! Woe to all! Woe to New Aberfoyle!"

"SILFAX."

"Silfax!" exclaimed both Simon Ford and Madge.

"Who is this man?" asked Harry, whose gaze shifted alternately from his father to the girl.

"Silfax!" Nell repeated in despair, "Silfax!"

And her whole being trembled as she murmured that name, while Madge, seizing her, almost forcibly led her back to her room.

James Starr had rushed over. After reading and rereading the threatening sentence:

"The hand that wrote these lines," he said, "is the same one that wrote me the letter contradicting yours, Simon! This man's name is Silfax! I can see from your confusion that you know him! Who is this Silfax?"

XX

The penitent

That name had been quite a revelation for the old overman.

It was that of the last "penitent" from the Dochart pit.

Long ago, before the invention of the safety lamp, Simon Ford had known this fierce man who, at the risk of his life, went every day to trigger the partial explosions of firedamp. He had seen this strange being, prowling in the mine, always accompanied by an enormous snowy owl, a kind of monstrous owl, which helped him in his perilous work by carrying a lit fuse where Silfax's hand couldn't reach. One day, this old man disappeared, and with him, a little orphan girl, born in the mine and whose only remaining relative was him, her great-grandfather. This child, of course, was Nell. For fifteen years, the two of them had lived in some secret abyss, until the day Nell was rescued by Harry.

The old overman, torn between feelings of pity and anger, communicated to the engineer and his son what the sight of the name Silfax had just revealed to him.

This clarified the whole situation. Silfax was the mysterious being that had been sought in vain in the depths of New Aberfoyle!

"So you knew him, Simon?" asked the engineer.

“Yes, indeed,” replied the foreman. “The man with the snowy owl! He was no longer young. He must have been fifteen or twenty years older than me. A sort of savage, who kept to himself, who was said to fear neither water nor fire! He had chosen the penitent's life out of personal inclination, a profession few cared about. This dangerous occupation

had unsettled his mind. People said he was wicked, and perhaps he was simply mad. His strength was prodigious. He knew the coal mine like no one else—as well as I did, at least. People considered him quite adept at it. Honestly, I thought he'd been dead for many years."

— But, James Starr continued, what does he mean by these words: "You stole the last vein of our old coal mines"?

"Ah! There it is," replied Simon Ford. "A long time ago, Silfax, whose brain, as I told you, has always been deranged, claimed to have rights to the old Aberfoyle. And so his temper grew more and more ferocious as the Dochart pit—his pit!—was drained! It seemed as if his very entrails were being torn from his body with every blow of the pickaxe!" "You must remember that, Madge?"

"Yes, Simon," replied the old Scottish woman.

"It comes back to me now," Simon Ford continued, "since I saw the name Silfax on that door; but, I repeat, I thought he was dead, and I could not imagine that this evil being, whom we have sought so much, was the former penitent of the Dochart pit!"

"Indeed," said James Starr, "it all makes sense now. Chance revealed the existence of the new deposit to Silfax. In his mad selfishness, he must have wanted to become its defender, living in the coal mine, roaming it night and day. He must have discovered your secret, Simon, and learned that you were urgently calling for me at the cottage. Hence, this letter contradicting yours; hence, after my arrival, the block of stone hurled at Harry and the destroyed ladders of the Yarow shaft; hence, the sealing of the cracks in the wall of the new deposit; hence, finally, our confinement, then our liberation, which was accomplished thanks to the helpful Nell, no doubt without Silfax's knowledge or even in spite of him!"

"You've just described things exactly as they must have happened, Mr. James," replied Simon Ford. "The old penitent is certainly mad now!"

"That's better," said Madge.

"I don't know," James Starr replied, shaking his head, "for his madness must be terrible! Ah! I understand why Nell cannot think of him without horror, and I also understand why she didn't want to denounce her grandfather! What sad years she must have spent near that old man!"

"How sad!" replied Simon Ford, between this savage and his snowy owl, no less savage than himself! For, of course, that bird isn't dead! It can only be him who put out our lamp, him who nearly cut the rope from which Harry and Nell were hanging!

"And I understand," said Madge, "that the news of her granddaughter's marriage to our son seems to have exacerbated Silfax's resentment and redoubled his rage!"

"Nell's marriage to the son of the man he accuses of stealing the last Aberfoyle deposit from him can only have brought his irritation to a head!" Simon Ford continued.

“He’ll have to come to terms with this union!” Harry exclaimed. “However unfamiliar he may be with married life, we’ll eventually make him admit that Nell’s new life is better than the one he was forcing her into down in the coal mine! I’m sure, Mr. Starr, that if we could get our hands on him, we could talk some sense into him!”

“One cannot reason with madness, my poor Harry!” replied the engineer. “It is surely better to know one’s enemy than to ignore him, but all is not lost, because we now know what he is. Let us remain vigilant, my friends, and to begin with, Harry, we must question Nell! We must! She will understand that, at this point, her silence is no longer justified. In her grandfather’s own interest, it is fitting that she speak. It is as important to him as it is to us that we thwart his sinister plans.”

“I have no doubt, Mr. Starr,” Harry replied, “that Nell will come of her own accord to answer your questions. You know now that it was out of conscience, out of duty, that she has remained silent until now. It is out of duty, out of conscience, that she will speak whenever you wish. My mother was right to escort her back to her room. She greatly needed to be alone with her thoughts, but I will go and fetch her…”

"It's useless, Harry," said the girl in a firm, clear voice, as she entered the great hall of the cottage at that very moment.

Nell was pale. Her eyes showed how much she had cried; but she seemed resolute in the course of action that her loyalty commanded her at this moment.

"Nell!" Harry exclaimed, rushing towards the girl.

“Harry,” replied Nell, who with a gesture stopped her fiancé, “your father, your mother, and you must know everything today. You must also know everything, Mr. Starr, concerning the child you took in

without knowing her, and whom Harry, to his misfortune, alas!, rescued from the abyss."

"Nell!" Harry exclaimed.

"Let Nell speak," said James Starr, silencing Harry.

"I am old Silfax's granddaughter," Nell continued. "I never knew a mother until the day I walked in here," she added, looking at Madge.

— May this day be blessed, my daughter! replied the old Scottish woman.

"I never knew a father until the day I saw Simon Ford," Nell continued, "and a friend until the day Harry's hand touched mine! I lived alone for fifteen years, in the most remote corners of the mine, with my grandfather. 'With him' is a bit of an exaggeration. 'Through him' would be more accurate. I hardly ever saw him. When he disappeared from the old Aberfoyle, he took refuge in those depths that only he knew. In his own way, he was good to me then, though frightening. He fed me what he went to fetch from outside; but I have a vague memory that, at first, during my earliest years, I had a goat for a nurse, whose loss grieved me greatly. Grandfather, seeing me so distressed, first replaced it with another animal—a dog, he told me. Unfortunately, this dog was cheerful. It barked." Grandfather didn't like cheerfulness. He hated noise. He had taught me silence, but hadn't been able to teach it to the dog. The poor animal disappeared almost immediately. Grandfather had a wild bird for a companion, a snowy owl, which at first horrified me; but this bird, despite the repulsion it inspired in me, took such an interest in me that I ended up returning it. It had come to obey me better than its master, and that even worried me for it. Grandfather was jealous. The snowy owl and I hid from each other as much as we could the fact that we were getting along so well! We understood that we had to!... But that's too much about me! It's about you...

"No, my daughter," replied James Starr. "Say things as they come to you."

"My grandfather," Nell continued, "always frowned upon your presence in the coal mine. There was plenty of space, though. He chose his refuges far, far away from you. He disliked having you there. When I asked him about the people up there, his face would darken, he wouldn't answer, and he'd become almost mute for long periods. But his anger truly erupted when he realized that, no longer content with the old property, you seemed intent on encroaching on his. He swore that if you managed to get into the new mine, known only to him until

then, you would perish! Despite his age, his strength is still extraordinary, and his threats made me tremble for you and for him."

"Go on, Nell," Simon Ford said to the young girl, who had paused for a moment, as if to better gather her memories.

"After your first attempt," Nell continued, "as soon as Grandfather saw you enter the New Aberfoyle mine shaft, he blocked the entrance and made it a prison for you. I only knew you as shadows, vaguely glimpsed in the dark coal mine; but I couldn't bear the thought of Christians starving to death in those depths, and, at the risk of being caught, I managed to get you some water and bread for a few days! I would have liked to lead you out, but it was so difficult to outwit my grandfather! You would have died! Jack Ryan and his companions arrived… God allowed me to meet them that day! I led them to you. On the way back, my grandfather caught me. His anger toward me was terrible. I thought I was going to die by his hand! From then on, life became unbearable for me." My grandfather's ideas went completely astray. He proclaimed himself the king of shadow and fire! When he heard your picks striking those veins he considered his own, he flew into a rage and beat me mercilessly. I wanted to flee. It was impossible; he guarded me so closely. Finally, three months ago, in a fit of nameless madness, he lowered me into the abyss where you found me, and disappeared, after vainly calling to the snowy owl, which remained faithfully by my side. How long had I been there? I don't know! All I know is that I felt I was dying when you arrived, my Harry, and when you saved me! But, you see, old Silfax's granddaughter cannot be Harry Ford's wife, since your life, all of your lives, are at stake!

"Nell!" Harry exclaimed.

"No," the girl replied. "My sacrifice is made. There is only one way to avert your downfall: I must return to my grandfather. He threatens all of New Aberfoyle! He is a soul incapable of forgiveness, and no one can know what the spirit of vengeance will inspire in him! My duty is clear. I would be the most wretched of creatures if I hesitated to fulfill it. Farewell! And thank you! You have shown me happiness in this world! Whatever happens, know that my whole heart will remain with you!"

At these words, Simon Ford, Madge, and Harry, mad with grief, had stood up.

"What, Nell!" they cried in despair, "you want to leave us!"

James Starr brushed them aside with an authoritative gesture, and, going straight to Nell, took both her hands.

“That’s good, my child,” he told him. “You’ve said what you had to say; but here’s what we have to say to you. We won’t let you go, and if necessary, we’ll keep you by force. Do you really think we’re capable of such cowardice as to accept your generous offer? Silfax’s threats are formidable, admittedly! But, after all, a man is only a man, and we’ll take our precautions. However, can you, for Silfax’s own sake, tell us about his habits, where he’s hiding? We want only one thing: to render him harmless, and perhaps bring him to his senses.”

“You want the impossible,” Nell replied. “My grandfather is everywhere and nowhere. I never knew his retreats! I never saw him asleep. When he found some refuge, he would leave me alone and vanish. When I made my decision, Mr. Starr, I knew exactly what you could tell me. Believe me! There’s only one way to disarm my grandfather: if I manage to find him. He’s invisible, but he sees everything. Ask yourself how he could have discovered your most secret thoughts, from the letter written to Mr. Starr to my plan to marry Harry, if he didn’t have the inexplicable ability to know everything. My grandfather, as far as I can tell, is, even in his madness, a powerful man of mind. He has, in the past, told me great things.” He taught me about God, and deceived me on only one point: when he made me believe that all men were treacherous, when he tried to instill in me his hatred for all humanity. When Harry brought me back to this cottage, you thought I was merely ignorant! I was more than that. I was terrified! Ah! Forgive me! But for a few days, I believed myself to be in the power of the wicked, and I wanted to flee from you! What began to bring my mind back to the truth was you, Madge, not through your words, but through the sight of your life, when I saw you loved and respected by your husband and son! Then, when I saw those happy, good workers venerating Mr. Starr, whom I had at first believed to be their slaves, when for the first time I saw the entire population of Aberfoyle come to the chapel, kneel there, pray to God, and thank Him for His boundless kindness, then I said to myself, "My grandfather deceived me!" But now, enlightened by what you have taught me, I think he deceived himself! So I will retrace the secret paths by which I once accompanied him. He must be watching me! I will call to him... he will hear me, and who knows if, by returning to him, I will not bring him back to the truth?

They had all let the young girl speak. Each sensed that it must have been good for her to open her whole heart to her friends, at a time when, in her generous illusion, she believed she was about to leave them forever. But when, exhausted, her eyes filled with tears, she fell silent, Harry, turning to Madge, said:

"Mother, what would you think of the man who would abandon the noble girl you just heard?"

"I would think," replied Madge, "that this man is a coward, and if he were my son, I would disown him, I would curse him!"

"Nell, you heard our mother," Harry continued. "Wherever you go, I'll follow you. If you insist on leaving, we'll leave together..."

"Harry! Harry!" cried Nell.

But the emotion was too strong. The girl's lips paled, and she fell into Madge's arms, who begged the engineer, Simon, and Harry to leave her alone with her.

21st

Nell's wedding

We parted ways, but it was agreed that the cottage's guests would be more vigilant than ever. Old Silfax's threat was too direct to ignore. One had to wonder if the former penitent possessed some terrible means capable of annihilating all of Aberfoyle.

Armed guards were posted at the various exits of the coal mine, with orders to keep watch day and night. Anyone unfamiliar with the mine had to be brought before James Starr so that he could verify their identity. The inhabitants of Coal-city were informed of the threats facing the underground colony. Since Silfax had no informants in the area, there was no fear of betrayal. Nell was informed of all the security measures that had just been taken, and, while not completely reassured, she regained some peace of mind. But Harry's resolve to follow her wherever she went had, more than anything else, contributed to extracting from her the promise not to run away.

During the week preceding Nell and Harry's wedding, no incidents disturbed New Aberfoyle. Thus, the miners, without abandoning organized surveillance, recovered from the panic that had nearly jeopardized the operation.

However, James Starr continued the search for old Silfax. The vindictive old man having declared that Nell would never marry Harry, it had to be admitted that he would stop at nothing to prevent the marriage. The

best course of action would have been to capture him, while respecting his life. The exploration of New Aberfoyle was therefore meticulously resumed. The tunnels were searched up to the upper levels that exposed the ruins of Dundonald Castle in Irvine. It was reasonably assumed that Silfax communicated with the outside world through the old castle and obtained the necessities for his miserable existence, either by buying or by plundering. As for the "Ladies of Fire," James Starr suspected that some gas explosion occurring in that part of the coalfield might have been ignited by Silfax and produced this phenomenon. He was not mistaken. But the searches proved fruitless.

James Starr, during this constant struggle against an elusive being, was, without showing it, the most miserable of men. As the wedding day approached, his fears increased, and he felt compelled, exceptionally, to share them with the old overman, who soon became even more worried than he was.

Finally, the day arrived.

Silfax had not given any sign of life.

From early morning, the entire population of Coal City was up and about. Work at the New Aberfoyle had been suspended. Foremen and workers alike were eager to pay tribute to the old overman and his son. It was simply a way of repaying their debt of gratitude to the two bold and persevering men who had restored the coal mine to its former prosperity.

It was at eleven o'clock, in the chapel of Saint-Gilles, built on the shore of Lake Malcolm, that the ceremony was to take place.

At the appointed time, Harry was seen leaving the cottage arm in arm with his mother, and Simon Ford arm in arm with Nell.

Next came engineer James Starr, seemingly impassive, but deep down expecting anything, and Jack Ryan, superb in his piper's clothes.

Then came the other mine engineers, the notables of Coal-city, the friends, the companions of the old overman, all the members of that great family of miners, who formed the special population of New Aberfoyle.

Outside, it was one of those sweltering August days that are particularly unbearable in northern countries. The stormy air penetrated deep into the coal mine, where the temperature had risen abnormally. The

atmosphere there was saturated with electricity, through the ventilation shafts and the vast Malcolm tunnel.

One could have observed—a rather rare phenomenon—that the barometer in Coal-city had dropped considerably. It truly made one wonder if some storm was about to break beneath the shale vault that formed the ceiling of the immense crypt.

But the truth is that no one inside was concerned about the atmospheric threats from outside.

Everyone, needless to say, had donned their finest clothes for the occasion.

Madge wore a costume reminiscent of those of olden times. She wore a "toy" on her head, like the old matrons, and on her shoulders floated the "rokelay", a kind of checkered mantilla that Scottish women wear with a certain elegance.

Nell had promised herself that she would not let on about the turmoil of her thoughts. She forbade her heart to beat, her secret anxieties to betray themselves, and the courageous child managed to show everyone a calm and composed face.

She was simply dressed, and the simplicity of her clothing, which she had preferred to richer outfits, added to her charm. Her only headwear was a snood, a ribbon of various colors commonly worn by young women from New Caledonia.

Simon Ford had an outfit that the worthy bailiff Nichol Jarvie, from Walter Scott, would not have disowned.

The whole crowd headed towards the chapel of Saint-Gilles, which had been luxuriously decorated.

In the Coal-city sky, the electric discs, revived by more intense currents, shone like so many suns. A luminous atmosphere filled all of New Aberfoyle.

In the chapel, the electric lamps also cast bright glimmers, and the colored stained-glass windows shone like kaleidoscopes of fire.

Reverend William Hobson was to officiate. He was waiting for the arrival of the bride and groom right at the gate of Saint-Gilles.

The procession was approaching, after having majestically circled the shore of Lake Malcolm.

At that moment, the organ was heard, and the two couples, preceded by Reverend Hobson, headed towards the apse of Saint-Gilles.

Heavenly blessing was first invoked upon all those present; then Harry and Nell remained alone before the minister, who held the holy book in his hand.

"Harry," asked Reverend Hobson, "do you take Nell to be your wife, and do you swear to love her always?"

"I swear it," replied the young man in a loud voice.

"And you, Nell," the minister continued, "will you take Harry Ford as your husband, and…"

The young girl hadn't had time to reply before a huge clamor resounded outside.

One of those enormous, terrace-like rocks overlooking the shore of Malcolm Lake, a hundred paces from the chapel, had suddenly opened up, without an explosion, as if its fall had been premeditated. Below, the waters rushed into a deep excavation, the existence of which no one knew.

Then suddenly, between the fallen rocks, a canoe appeared, which a vigorous push launched onto the surface of the lake.

On this canoe, an old man, dressed in a dark hood, with bristling hair and a long white beard falling onto his chest, was standing.

He held in his hand a Davy lamp, in which a flame shone, protected by the metal mesh of the device.

At the same time, in a loud voice, the old man shouted:

"Gripped coal! Gritted coal! Woe to all! Woe!"

At that moment, the faint odor that characterizes protocarbon hydrogen spread into the atmosphere.

And if this was the case, it was because the rockfall had released an enormous quantity of explosive gas, stored in huge "blowers" whose openings were blocked by shale. Jets of firedamp shot towards the vaults of the dome, under a pressure of five to six atmospheres.

The old man knew of the existence of these blowers, and he had suddenly opened them, so as to make the atmosphere of the crypt explosive.

However, James Starr and a few others, leaving the chapel in haste, had rushed to the shore.

"Out of the mine! Out of the mine!" cried the engineer, who, having understood the imminence of the danger, came to throw this cry of alarm at the gate of Saint-Gilles.

"Greasy gas! Greasy gas!" repeated the old man, pushing his canoe further onto the waters of the lake.

Harry, taking his fiancée, his father, and his mother with him, had hurriedly left the chapel.

"Out of the mine! Out of the mine!" James Starr kept repeating.

It was too late to flee! Old Silfax was there, ready to carry out his final threat, ready to prevent Nell and Harry's wedding by burying the entire population of Coal-city under the ruins of the coal mine.

Above his head flew his enormous snowy owl, whose white plumage was speckled with black spots.

But then, a man rushed into the waters of the lake, which swam vigorously towards the canoe.

It was Jack Ryan. He was trying to reach the madman before he could complete his work of destruction.

Silfax saw him coming. He broke the glass of his lamp, and, after pulling out the lit wick, he waved it through the air.

A deathly silence hung over the entire stunned audience.

James Starr, resigned, wondered why the inevitable explosion had not already annihilated New Aberfoyle.

Silfax, his features tense, realized that the firedamp, too light to remain in the lower layers, had accumulated towards the heights of the dome.

But then the snowy owl, at a gesture from Silfax, seizing the incendiary fuse in its foot, as it used to do in the galleries of the Dochart pit, began to climb towards the high vault, which the old man was showing it with his hand.

Just a few more seconds, and the New Aberfoyle would have been gone!

At that moment, Nell slipped away from Harry's arms.

Calm and inspired at the same time, she ran towards the shore of the lake, to the edge of the water.

"Snowy owl! Snowy owl!" she cried in a clear voice, "Come to me! Come to me!"

The faithful bird, astonished, had hesitated for a moment. But suddenly, having recognized Nell's voice, it had dropped the burning wick into the waters of the lake, and, tracing a wide circle, it had come to rest at the feet of the young girl.

The high explosive layers in which the firedamp had mixed with the air had not been reached!

Then a terrible cry rang out beneath the dome. It was the last cry uttered by old Silfax.

Just as Jack Ryan was about to lay his hands on the planking of the canoe, the old man, seeing his revenge slipping away, rushed into the waters of the lake.

"Save him! Save him!" cried Nell in a heart-rending voice.

Harry heard him. He jumped in to swim after him and soon joined Jack Ryan, diving in several times.

But his efforts were in vain.

The waters of Lake Malcolm did not release their prey. They had closed forever upon old Silfax.

XXII

The Legend of Old Silfax

Six months after these events, the strangely interrupted wedding of Harry Ford and Nell was celebrated in the chapel of St. Giles. After Reverend Hobson had blessed their union, the newlyweds, still dressed in black, returned to the cottage.

James Starr and Simon Ford, now free from all worry, joyfully presided over the party that followed the ceremony and continued into the next day.

It was in these memorable circumstances that Jack Ryan, dressed in his piper's costume, after inflating the bag of his bagpipe with air, achieved the triple result of playing, singing and dancing all at once, to the applause of the entire assembly.

And, the next day, the day and ground work resumed, under the direction of engineer James Starr.

Harry and Nell were happy, it goes without saying. These two hearts, so sorely tested, found in their union the happiness they deserved.

As for Simon Ford, the honorary overman of New Aberfoyle, he fully intended to live long enough to celebrate his fiftieth birthday with good Madge, who, incidentally, was only too happy to oblige.

"And after that one, why not another?" said Jack Ryan. "Two fifty wouldn't be too much for you, Mr. Simon!"

“You’re right, my boy,” replied the old overman calmly. “What would be so surprising about living to two hundred years old in the climate of New Aberfoyle, in this environment untouched by the harsh weather outside?”

Were the residents of Coal-city ever meant to attend this second ceremony? Only time will tell.

In any case, one bird that seemed destined for extraordinary longevity was old Silfax's snowy owl. It still haunted the gloomy estate. But after the old man's death, although Nell had tried to keep it there, it had flown away after a few days. Besides the fact that it clearly disliked human company any more than its former master, it seemed to harbor a particular grudge against Harry, and that this jealous bird had always recognized and hated him as Nell's first abductor, the one from whom it had fought in vain during the climb up the chasm.

Since then, Nell only saw him at long intervals, hovering above Lake Malcolm.

Did he want to see his old friend again? Did he want to plunge his penetrating gaze to the bottom of the abyss into which Silfax had been swallowed?

Both versions were accepted, because the snowy owl became legendary, and it inspired Jack Ryan to write more than one fantastic story.

It is thanks to this cheerful companion that the legend of the bird of old Silfax, the former penitent of the Aberfoyle coal mines, is still sung in Scottish evenings.

The End

*** END OF THE PROJECT GUTENBERG EBOOK THE BLACK INDIAS ***

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